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THE

AMERICAN MEDICAL INTELLIGENCER.

A CONCENTRATED RECORD OF MEDICAL SCIENCE AND LITERATURE.

From April 1, 1840, to April 1, 1841.

BY ROBLEY DUNGLISON, M. D., M. A. P. S.

Professor of the Institutes of Medicine, &c., in Jefferson Medical College of Philadelphia; one of
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of Massachusetts, New York, and Maryland, &c. &c. &c.

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THE

AMERICAN MEDICAL INTELLIGENCER.

Vol. IV. April 1, 1840. No. 1.

Art. I.—BITES OF POISONOUS SNAKES, AND REMEDIES.[1]

(From Dr. Poeppy's "Reise in Chili et Peru und auf dem Amazonstrome.")

The flamon, or jegon, which is found in the province of Huaunco, and is called in Maynas, afaunida, and in the Brazils, sacurucu, appears, in some inconsiderable points, to differ from the Brazilian species, and was described by me on the spot.—(See Frorieps's "Notizen aus der Natur und Heilkunde," Oct. 1831.) It is seen from two to seven feet long; the body is flat, and towards the tail unproportionably thick, the tail itself appearing very short, and as if it were broken. The heart-shaped head about three inches broad in full grown animals, and its extraordinary thin neck, indicate at the first glance its poisonous nature, although snakes exist, which are very dangerous, and do not possess these external characters. Their hideous appearance does not however prevent the Brazilian Indians from eating both the sacurucu and the jararaca (*Trigonocephalus flavescens*, *Cuiv.*); and one sees with astonishment these frightful animals brought out of the woods of Ega and Coaci for the purposes of food. His brown yellow colour and rough black oblique bands, give the flamon a great resemblance to the soil, and to the decayed leaves of the thick forests in whose darkest spots he loves to conceal himself, and thus increases his dangerousness. They vary in colour and size in different districts. Fortunately they are no where very frequent, and the first and only living individual that I encountered, in my daily excursions through the thickest woods about Pampayaco, brought my life into the greatest danger.

The Indians are universally of opinion, that the greater number of snakes sleep through the dry season of the year, and only become visible after the commencement of the rain, but that then their poison is doubly dangerous. The flamon never avoids a foot passenger, but rather awaits whatever approaches, confiding in his fearful weapons, and winding himself together into a spiral, after the manner of the rattlesnake, out of the centre of which the lurking head is projected forth. Without being trod upon, or in any way injured, the malicious creature strikes at the foot of the incautious traveller, or of cows, mules, ounces, &c., and produces a wound, which although it cannot be considered absolutely fatal, yet frequently costs the life of those attacked. The flamon is never seen otherwise than lying indolently, and in all probability he seizes the smaller mammalia and amphibia, in the same way as the rattlesnake and great boa (*yacumamau*) of Maynas, that is by means of a kind of fascination, which is produced by his unmoved gazing upon them, which apparently deprives them of their senses, and prevents voluntary flight. The Indians of Maynas even believe that hunters themselves may be thus fascinated, unless some one near by passes a rod

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[1] London Lancet, Dec. 28, 1839, p. 497.

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between the individual and the serpent, and thus interrupts the attracting stream which they suppose to exist between the two. In the United States attempts have been recently made, to vindicate the fact of the existence of this fascination of small animals. I have myself observed something of the same kind. I saw a great lurking snake, after more than a quarter of an hour, secure a frog which had been rendered powerless and incapable of flight during that time, and at last in a kind of despair attempted to make a spring in the direction of the snake, which cost him his life.

The treatment of the bites of snakes by the natives is very various in different parts of the country. They brought me water in which the root of a large cypress had been squeezed, and amongst the Peruvians great confidence is placed in an abominable mixture (excrementa humana aqua soluta pro potu largiter hauriendo, nec non pro vulneris cataplasmate adhibentur.) *The excision and cauterization of the wound immediately employed is undoubtedly the safest plan.*

In the Alleghanies of Pennsylvania I know a hunter, who had twice in his life been delivered by this means; having after the bite of a rattlesnake, with true Indian hardihood cut out the fleshy part in the form of a hole, and filling it several times with gunpowder, suffered it to be fired. Around Cuchero much is thought of the external and internal use of tuberosa (*Margueritas*, *Polianthes tuberosa. L.*), which, perhaps on this account is generally planted. The most active means, however, is the guaco, a twining plant, which is very abundant in Maynas, and is grown on the skirts of little plantations, taking the place of the twining lianus of such places, and agrees accurately with mikania guaco. It is easily known by the large indigo-blue spots that mark the under surface of its rough leaves. This spotted character is presented by many similarly employed plants, as the blue-black spotted stalks of calladium helleborifolium; and in the heart-shaped leaves, with a dark blood-red under surface, of an aristolochia, Maynas. Whether the knowledge of the curative powers of the guaco was first brought from Quito to Heralagia by the missionaries, or whether the Indians have known this plant of old, is uncertain; the last meritorious intendente militar of Maynas, Requena, sought to extend it generally. The employment is very simple, the wound is somewhat extended, and the fresh-pressed juice is dropped into it, the surrounding parts are repeatedly covered with the pressed leaves, and the juice is also taken by the mouth. The tincture made with common brandy is also much celebrated and recommended to travellers as a secure and easily carried means of cure. In Guayaquil little cakes are formed out of the fresh-bruised plants, which when dried in the sun retain their activity for a long time. The effect of the guaco is not in all cases alike quick and decided, but observations on bitten persons, both in Maranon and Ega, prove that after twenty-four hours' use the swelling had ceased, the pain vanished, and, with the exception of little ulcers, the cure had been effected. In Yuimaguas, and especially around Muniches, every year several persons are bitten by snakes, but the guaco had acted so efficiently, that, in the memory of men only two children were known to have died from such wounds. Only against one kind of snake is this remedy said to be useless, the unuca machacaya, which is of a lively green colour, and about three feet long.

The guaco, of Colombia, judging from some leaves that were brought by merchants to Nasso, coming down from Moyobamba, is entirely the same as that of Yuimaguas, Pebas, and Ega. Both as a remedy and a prophylactic, it has made a great noise in Colombia, and a long essay of Dr. Man. Maria Zuigano (*Gazeta de Bogota*, 1829) gives some valuable information, which, on the supposition that they may not be generally known, I have given an abstract of, leaving out those facts which Virey (*Bulletin de Pharm:* VI. p. 244) has made known and derived from the same source:—

" The guaco is known and treasured in all Colombia as an infallible remedy, and the experiments of Drs. J. C. Mutis and D. N. Mutis, in Mariquita, and

Dr. P. F. Vargas, give favourable results. In the snake-infested Choco, especially around Buenaventura, its employment is very old. In the forests of Magdalena and Caqueza it has been lately introduced by the zeal of the priests. According to the report of Father Nieto, 220 natives were bitten in Fomeque, within eleven years, but, with the exception of eight persons, they were all cured through the treatment of the guaco, lemon-juice, and salts. In the parish of Ubaque more than 200 persons were bitten in fourteen years, and, with the exception of a girl, in whose case no remedy was applied, they were all cured by the use of the guaco. D. Andres Perez, rector of Caqueza, had preserved many of his parishioners by means of the guaco, which he had employed externally and internally, in combination with the cupping glasses and ammonia and oil. He tells an anecdote, which sounds rather fabulous, of the effects of the guaco upon the snake itself. One of the poisonous kind having had some of the juice administered to it, fell into a state of stupefaction, and afterwards, in spite of several bites, it was no longer in a condition to kill even a little dog, as its poison had lost its activity. The inoculation with the use of the guaco has long been used in Colombia as a preservative. D. Josemaria Esteves, Bishop of St. Marto, subjected all Indians to this operation, the consequence of which was, that they lost all fear of snakes." In this account there is undoubtedly some exaggeration, but that the plant possesses considerable powers is to me certain, from the numerous opportunities I have had of observing its effects on bitten Indians. A new medicine, under the name of guaco-root, was brought a few years since from Vera Cruz to Hamburgh, (see *Pfaff Mittheil.* and *Gaz. d. Med. Chirurg. u. Pharm.*, 1833, p. 352); but it possessed no properties in common with the mikania guaco, and the root of the plant is not used by the Indians.

Besides the guaco, there is a little plant with yellow blossoms (herpestes colubrina,) which is said to be still more active. The truth of this assertion I have had no opportunities of confirming. At Lamas the dorstenia tubicina, R. Pav., which is very common there, is used. In Ega they employ aristolochia cynanchifolia, Mart., and the fallen leaves of some unknown herbaceous plants, probably of a lesbaina or some of the rubiaceæ.

The symptoms, after a wound by a snake, are in the highest degree alarming. In my own case the pain commenced in the inguinal glands in less than ten minutes after the bite, and with such violence and so rapid swelling that the free use of the entire limb was lost. After a quarter of an hour, nausea, pain in the head, dimness of the eyes, and a partial palsy of the tongue came on; and at the same time an indescribable burning sensation, apparently more in the course of the bones than between the muscles, occurred in the wounded foot. In less than half an hour the fever had reached a great height, the operation[1] was over, and the repeated fits of fainting were followed by stupefaction, which probably gave to the external observer the appearance of actual death. During this state, which lasted about eight hours, some blood flowed from the nose, which is considered by the Indians a fatal sign. On awaking, the rending pain was very severe, but changed in its character; the leg, even up to the hip, was swollen to a frightful size, perfectly immovable, cold, and on the surface destitute of feeling, but sensible, even to pain, of the slightest shaking; the breast and upper arm of the same side were likewise swollen. A copious perspiration, with fever and headach, had commenced, consciousness was perfect, and a crisis was evident. Fomentations of polianthes and mucilaginous drinks were used, and the wound was dressed by an Indian, with a warm poultice, made from the leaves of tobacco and the solanum incanum, R. Pav., a beautiful tree, which in the neighbourhood grew very abundantly; but it was two weeks before the swelling would permit even the leaving of the bed. The wound healed very slowly, and only at last closed by the constant use, for many weeks, of the very astringent bark of the macronemum corymbosum, R. Pav. The fever left after the establishment of suppuration, and the peculiar pain of the poisoning disappeared at the same time. No other consequence was felt besides a kind of nervous sensibility, disagreeable enough, which produced a shuddering and trembling at the slightest noise during an excursion, and induced great horror at even the sight of a dead snake.

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[1] This operation, which is described in the text, consisted in the excision, or, rather, from the want of better instruments, in the tearing away by a pack-needle, a portion of the skin and muscle in the region of the wound, and the subsequent application of a piece of red-hot gold, the superstition of the Peruvians not allowing them to apply silver or iron.—TRANSLATOR.

Whether ammonia is useful against the bites of American snakes I do not know; little confidence is placed in it in the interior of America. Arsenic and corrosive sublimate are both celebrated in Peru and Colombia. But prevention is better than cure, and by an adequate clothing for the feet, and other little foresights, preservation from the ordinary possibilities of wounding may be insured, as poisonous snakes in hot regions are nothing near so frequent as is generally supposed.

For the American Medical Intelligencer.

ART. II.—COLD DOUCHE IN ENCEPHALITIS.

BY ABNER HESTER, M. D., NEW ORLEANS.

[This is an additional instance to the many we already possess of the utility of the cold douche, as a revellent, in encephalitis and cerebral excitement. Dr. Hester ascribes the disease to what he considers improper treatment on the part of the physician, who preceded him in attendance. We regret to see this. Charity and correct professional etiquette should induce us to be very cautious in making these charges, especially as in all such cases good reasons could, we doubt not, be assigned for the course animadverted upon.—ED.]

New Orleans, La., February 28, 1840.

Dr. R. Dunglison, M. D.

Dear Sir.—I send you the following case, and should you find it worthy a place in your valuable Journal, you will please insert it, and oblige, very respectfully yours.

ABNER HESTER, M. D.

On the night of the 14th of August, 1838, I was requested to visit, at 12 o'clock, W. R., æt. 25, who was said to be dangerously ill. I ascertained that he had been under the treatment of a physician for several days, and I accordingly desired the attending physician to meet me in consultation on the case. This he declined, asserting nothing could be done for the patient—that he must inevitably perish, since medicines could not arrest the progress of his disease. Being earnestly solicited by the friends of the sick man, I consented to see him. Some days previously, after fatigue, and exposure to a hot sun, he was suddenly seized with an affection of the chest, attended with cough, and some pain, on taking a full inspiration. In his person he was tall; muscles well developed; chest rather contracted and sunken; cranium small, and indicating a feeble intellect. As his physician was opposed to blood-letting, he gave him pectorals, and anodynes, into which opium entered largely. Previously, however, to this, the patient had been seriously devoting his time to the study of some new religious doctrine.

The influence of religious impressions, joined to the treatment, soon determined the excitement and irritation to the brain and its membranes, which in the course of a few hours, exploded with dangerous symptoms. This continued to increase for two days and nights, under increasing doses of opium and other "nervous sedatives." W. B. was at this time quite unmanageable, his countenance was flushed—his eyes injected, and rolling in "liquid fire"—breathing vengeance and threatenings against all who entered his chamber. It was not without great difficulty that I could examine his pulse. This I found remarkably full, and incompressible—slow and creeping, which, from the agitated and excited state of the patient's brain, created some surprise. His tongue was dry and coated—skin hot, and free from the least moisture. The primitive pectoral symptoms were entirely merged in the encephalic inflammation. After at least two hours trial and delay, I succeeded in opening a large orifice in one of the veins of the arm. The blood flowed until the pulse fell and the skin became moist. He also grew somewhat calm.

To second the bleeding, I ordered stimulating hot pediluvia, and an active dose of prot. chlorid. hydrarg. and ext. colocynth. comp. was administered in some sugared coffee, this being the only beverage he could be induced to take. August 15th, patient more composed, after the V. S., pediluvia, and administration of the purgative.

Two or three copious dark dejections were procured by the medicine, assisted by laxative and stimulating lavements. Pulse 80, full and somewhat resisting; condition of tongue improved a little. V. S. repeated ad deliquium animi. For first time, patient recognised those around him—answered a few questions. Much conversation, however, prohibited in his presence. Continue cathartic medicines, in small, but repeated doses. Ordered his head shaved, (it was impossible to effect this before, owing to the intractable disposition of the patient.) Cold applications to the head, light excluded, and every cause of excitement carefully guarded against. Patient improving—some appetite—light soups—cerebral symptoms somewhat aggravated, in consequence of patient's rising from bed to chastise his nurse. Cups to occiput. At this time pectoral symptoms returned, with some pain, and slight cough—respiration hurried. Blister to affected side—expectoration mucous—pulse feeble. In this manner he gradually improved, but as the cerebral inflammation subsided, the pectoral affection seemed increased. This I, however, attempted to obviate by keeping up a discharge from the blistered surface. Nothing occurred to impede the progress of the cure, until the night of the 17th, when, by mistake, the nurse gave him two or three large potions of camphor mixture, which induced violent delirium, restlessness, and great agitation. Pulse small, and frequent—skin dry—tongue coated—secretion from blister arrested.

As repeated venesections, cups, and active cathartics, had greatly reduced the powers of the system, I could not appeal to them the second time, without hazard of life. I therefore, as the last remedial agent, resolved to test the efficacy, in this case, of cold affusions upon the head.

This surpassed my most sanguine expectations—it soothed the feelings, regulated the pulse—"quenched delirium," and the patient became peaceable, and rational, expressing for the first time some gratitude for our kindness and attention. A quiet sleep was brought on, after a short time, which only left him, to give place to convalescence.

P. S. The above case occurred in a neighbouring state.

Art. III.—CLINICAL LECTURE ON INTERNAL UTERINE HEMORRHAGE.

BY J. T. INGLEBY, M. D.[1]

Fellow of the Royal College of Physicians, Edinburgh.

On the present occasion I wish to call your attention to the subject of uterine hemorrhage, in one of its most peculiar and imminently dangerous forms—I mean hemorrhage accompanied by a detachment of the placenta, together with an infiltration of blood in its substance, constituting what has been termed *placentary apoplexy*, and arising about the close of pregnancy. It may occur either independently of labour, or whilst labour is progressing. The one object I have in view being to have the matter fully understood by you all, I will enter upon the subject without further preface, studying only plainness and clearness of description.

I have said I wish to call your attention to hemorrhage, accompanied with detachment of the placenta. First of all, then, I would have you observe, that the detachment usually commences *about the centre* of the mass, and extends to every part of it, the edge excepted, which maintains its natural apposition; consequently, a large quantity of blood soon becomes confined between the placental and uterine surfaces. The uterine tumour at these points becomes raised in proportion to the amount of effusion, its rapid augmentation constituting the most striking feature in the case. But it is important to observe, that the effusion may commence *any where between the centre of the placenta and its edge*, which almost necessarily becomes more or less detached, so that whilst a large coagulum is confined, partly underneath the placenta and partly exterior to the membranes, the liquid blood continues detaching the membranes until it reaches the vagina: I have seen both forms of hemorrhage. The first, or *concealed* form, from its greater liability to deceive the practitioner than the second, may be regarded as the more dangerous case, although the extent of hemorrhage *in this form* is less considerable than *in the other.* I shall presently state a remarkable exception; but this, as a rule, is generally correct.

Case.—Mrs. B. has ten or eleven children, and was subjected to my professional notice when about nine months advanced in pregnancy. During the night of Friday, Sept. 8, a discharge of blood, both clotted and fluid, occurred several times; and at three o'clock, on Saturday morning, my friend Mr. Rice was called to see her. Although she had reached the full period of pregnancy, no pain took place until subsequently to the attack of hemorrhage, and the degree of pain which then arose was inconsiderable. The amount of hemorrhage was trifling, three napkins only having been stained, but the depression of the general system had progressively increased, and was at that time most alarming. On examining the uterine tumour, Mr. Rice's attention was immediately directed to a very marked singularity in its shape, the shape being exceedingly pointed, having its long diameter in the antero-posterior direction. I accompanied Mr. Rice to the patient at eight o'clock. A. M. There was great prostration of strength, an exsanguine countenance, and the gaping which attends the state of syncope. The pulse was feeble and slow, and the defined eminence which occupied the summit of the uterine tumour, and for some extent around it, was much more elastic than the surrounding parts. Under a strong conviction—a conviction previously entertained by Mr. Rice—that the symptoms depended upon a large internal effusion of blood, I recommended immediate delivery; and, as Mr. Rice entertained similar views of the case, he undertook the operation without delay. Although there had been no regular labour-pain, the uterine orifice was moderately well dilated, and the membranes were sufficiently distended to admit of the bag being very easily ruptured. The circumstance of the membranes being *distended*, deserves your notice in reference to the manner in which the liquor amnii acquired its bloody appearance. On the membranes being ruptured, a large amount of deep-coloured, bloody fluid instantly rushed out of the vagina. During the delivery of the lower extremities, a quantity of tolerably consistent blood, mixed with small clots, continued to escape, and, on the completion of the delivery, an immense clot was expelled somewhat forcibly. This was rapidly followed by the placenta having, upon its uterine surface, and within about a third of its texture, a mass of coagulated blood. The coagula were so interwoven with the parts as to admit only of very partial removal, and this not without tearing the placenta. The shape of the placenta was sacculated at such of its parts as were not infiltrated, but merely covered by clot, the greater part of the blood having been confined in the sac. Brandy and the tincture of ergot, in combination, were resorted to several times during the delivery with excellent effect in sustaining the pulse, and securing an efficient uterine contraction. The patient would necessarily have been greatly alarmed by the vast disgorgement of blood from the uterus, had we not prepared her mind for the occurrence. As there was no direct escape of blood from the general system, there was no actual shock; rather, indeed, a revival from impending death to a state of comparative security. The large clot, of which I spoke above, weighed two pounds; and the liquid blood, such as, at least, could be collected, weighed two pounds more. Making allowance, then, for the blood which had become mixed with the liquor amnii, as well as for the blood which had escaped on the bed and napkins during the night, the actual loss, within six hours, must have been *upwards of five pounds, at the least.* It is certain that the uterus contained, at the moment of delivery, upwards of four pounds. I need scarcely say, that under so large and so sudden an effusion the fœtal circulation would very speedily cease.

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[1] London Lancet, Jan. 11, 1840, p. 553.

And now, gentlemen, let us inquire what practical inferences can be deduced from this narrative? Let us examine it in several points of view.

1st. *The mode of attack.*—The attack occurred *suddenly*, and was not the result of external injury—a very probable *means* of producing not only separation, but laceration of the placenta,[1] and laceration even of the uterus *itself.* Each of these injuries I have personally witnessed as the result of physical force, but in this case there was no pretence whatever for supposing the existence of such a cause. The circumstances which occasioned the separation of parts, and consequently the effusion of blood, can however only be conjectured. We can only say, with any certainty, that the effusion must have proceeded from a very large vessel.

2dly. *The symptoms.*—The symptoms were both *local* and *constitutional.* The former comprising the hemorrhage, which appeared external to the body—the shape of the uterine tumour—the *sensation* imparted to the hand when placed over its most projecting part (a sensation of undue elasticity when compared with the very slight elasticity which characterised the other parts of the uterine tumour,) and the peculiar character of the pains, the feeling being one of distress from distention, rather than of suffering from contraction. Hence it is impossible to resist the conclusion, that the pains arose as a consequence of the effusion. It has been already observed, that the pains were preceded by visible hemorrhage. The *constitutional symptoms* were merely those that are common to all severe hemorrhages, viz. torpor, drowsiness, repeated syncope, a pallid countenance, a feeble slow pulse, gaping, and coldness of skin.

I have only one remark to offer, in reference to the depression of the system, viz. that it was very great, and yet altogether disproportionate to the amount of visible discharge. Still the fact of an existing visible hemorrhage would naturally impress the mind with the conviction, that the sinking of the vital powers and the hemorrhage, slight as it was, must have had an important connection. In this respect, the evidence, if not altogether conclusive in the instance before us, was far more conclusive than characterised several fatal cases of a similar kind.

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[1] The case related by Mr. Wildsmith is a striking instance of this kind. The patient died during pregnancy, and on examination, P. M., a clot of blood was discovered, weighing eighteen ounces, at the anterior part of the fundus of the womb, and the placenta was lacerated.—See *North of England Med. and Surg. Journ.*, vol. i. p. 446.

3dly. *The condition of the membranes and of the liquor amnii*, is a point not altogether destitute of practical interest. There was nothing peculiar in the state of the os uteri; it was relaxed and partially open, but these characters are common to the uterine orifice at the close of pregnancy, in a person having had sevaral children, as was Mrs. B.'s case. The membranes were apparently entire, the presenting portion being moderately distended with fluid. *The liquor amnii* had a very bloody appearance, and gushed out very forcibly on the bag being ruptured. In its passage through the vagina, it is indeed usual for the liquor amnii to acquire a stain from the blood which may be lodging there, but here the fluid was uniformly bloody, the colour being almost as deep as blood itself. The precise cause of this is not easily explained. The fœtal side of the placenta was perfect, consequently the stain must have taken place, either from a slight tear at the edge of the placenta (a circumstance which would not prevent the presenting part of the sac from being moderately distended,) or it must have been the result of transudation. I incline to the former opinion, the *period* of transudation having been very short, although the transuding *surface*, from the size of the coagulum, was considerable. Certainly the fact of the liquor amnii not containing coagula may be supposed rather to favour the view last suggested. One is naturally led, therefore, to make an inquiry as to the source of the blood. Did it proceed from the placenta itself, or from the vessels of the uterus in connection with it? What are the probabilities? The placenta was very pulpy throughout, and about one third of the mass, from the edge towards the centre, was so completely infiltrated with blood, as to render the removal of the clots impracticable without breaking up the structure of the placenta itself. *Consequently it was impossible to detect any open vessel.* I am disposed to think, that the blood proceeded from the uterine system and not from the placental, and I will give my reasons for this opinion. As already observed, the infiltration was very limited in its extent, although it pervaded the whole thickness of the mass. Now, had the blood emanated from the interior of the placenta it could only have proceeded from a large vessel belonging to the umbilical system, and it is more than probable that the *greater part* of the placental mass would have been infiltrated. Moreover, had the case been so, I think the extravasation would have been apparent through the coverings of the fœtal surface. But it was not apparent in any degree. Neither is it probable that the blood, after traversing the interior of the mass, could have retained its fluidity sufficiently long to have passed in such large quantities into the uterine cavity. I can only account for the infiltration, by the supposition of a breach of surface having taken place in the placenta, whilst the extent of detachment was slight.

Such is as complete an outline of this remarkable case as it is possible to set before you in a lecture; and, considering the danger young practitioners are in, of forming a wrong judgment upon the symptoms, and the danger of improper treatment to the patient, I do most earnestly press upon you the duty of a careful study of this and similar cases. I will now lay before you all the information I have been able to obtain on this particular kind of hemorrhage, and a case or two not previously recorded. My own work, on "Hemorrhage," contains scarcely any thing on the subject; indeed the records respecting it are very scanty. Dr. Simpson's elaborate paper, on "Diseases of the Placenta," contains several references to the class of cases immediately before us; I recommend you to peruse this paper carefully. It evinces great research, and is replete with practical information.[1] Dr. Merriman alludes very briefly to the circumstance, that syncope, or even death itself, may be occasioned by an effusion of blood between the uterus and placenta, whilst "there may be very little appearance of discharge from the vagina." Dr. Blundell, also, in adverting, in general terms, to instances of death occurring suddenly in the last months of pregnancy, observes—"On laying open the body after death, two or three pounds of blood may be discovered within the cavity of the uterus, and this, too, although there may have been no external bleeding." The first case which I have met with is related by the celebrated Albinus,[2] where only the central part of the placenta being loosened, a large quantity of coagulated blood was lodged between it and the uterus, as it were, in a bag, and, consequently, not a drop was discharged per vaginam. "Had the nature of the case been understood (observes Albinus,) the patient might have been saved by rupturing the membranes, and delivering immediately." Four cases are related by M. Baudelocque. The mother was saved in three of the cases, but the child perished in each of them. In one of these the quantity of blood behind the placenta was estimated at four or five *palettes*.[3] Baudelocque relates a fifth case; the hemorrhage, however, took place within the membranes, and not behind the placenta. Two cases are related by M. de Laforterie; the first case terminated fatally, after twelve hours' labour pain, and before competent assistance could be obtained.[4] M. De Laforterie, however, performed the Cæsarean operation, and, on opening the fundus uteri, a pound and a half of liquid black blood immediately gushed out, which had been contained in a sac, between the placenta and the uterine surface, the centre of the placenta having been detached, while the edge remained adherent. The child was extracted alive, but speedily died. In the second case, the quantity of blood is said to have measured three French *chopines*.[5]

Mr. Saumarez adduces a well-authenticated, but fatal case, of this form of hemorrhage. There was no discharge per vaginam. On examination, P. M., the placenta was every where detached, excepting its edges, which "were completely adherent, forming a kind of *cul de sac*, into which blood had been poured to the amount of a pint and a half, which had become *coagulated* within the cavity thus formed." The patient was also attended by Drs. Denman and Denison.[6] Dr. Hamilton describes two cases. In the first, premature labour occurred spontaneously. "In the central part of the placenta a strong coagulum of blood, the size of an afternoon teacup, was discovered. The adhesion of the edges of the placenta had saved the patient." The result of the second case was less fortunate. The symptoms were those of collapse, and "the lady felt as if she were going to burst; there was no discharge from the uterus, and no symptoms of labour. Immediate delivery was accomplished, by passing the hand into the uterus, and a dead infant was extracted, which was followed by an immense quantity of coagulated blood and the placenta. The patient almost instantly expired."[7] I now refer you to a very clear and concise paper on this subject, illustrated by a particularly well-marked case, by my friend, Mr. J. M. Coley.[8] The effusion was characterised by a sudden enlargement of the uterine tumour, together with a sensation of pain, as though the abdomen would burst, and by frightful collapse of the vital powers. There was no discharge whatever from the vagina. Delivery was accomplished by rupturing the membranes, and the administration of ergot; and, on the expulsion of the placenta, it was ascertained that blood had been effused, between the placenta and the uterus, to the amount of two pounds, and also extravasated within the placental cells.

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[1] See "Edin. Med. and Chir. Journ." for April 1, 1836.

[2] "Annot. Acad.," lib. i, c. 10., p. 56.

[3] The *palette* contains four ounces.—Ed. L.

[4] See "Journ. Gén.," tom. 29, p. 384, and quoted in Mons. C. A. Baudelocque's "Traité des Hæmorrhagies Internes de l'Uterus."

[5] The *chopine* contains about an English pint.—Ed. L.

[6] See No. 6, "New Lond. Med. and Phy. Journ.," p. 535.

[7] See "Prac. Observ." part ii., p. 235–6.

[8] See Lancet for 9th January, 1830, p. 498.

I shall now mention two cases which have presented themselves to my notice. Some weeks ago I was requested to see a woman, reported to be in convulsions. Before I could reach the house she had expired—labour was supposed to have commenced the preceding evening. A respectable surgeon employed in the case, finding the pains excessively feeble, and the system much depressed, ruptured the membranes. The liquor amnii was colourless, and no hemorrhage was observable at any time. The body was examined, P. M., by the surgeon just alluded to, assisted by my friend Mr. Wickenden and myself. The form of the uterine tumour was strikingly conical. On cutting through the uterine parietes, so as barely to receive the end of the scalpel—fluid blood rushed out like the stream in venesection. By means of a sponge 60 ounces of liquid blood were collected, and, on enlarging the aperture, a coagulum was removed which weighed 61 ounces, the whole comprising 121 ounces of blood; the plecental edge was still adherent, so that there had been no escape of blood underneath the membranes. The circumference of the placenta was inordinately large. The other case, which, in several respects, is unlike the one just reported, derives an interest from the amount of blood being very trivial, and yet proving fatal to life. A young woman, from three to four months pregnant, having just eaten breakfast, went upstairs in perfect health and spirits to make her bed. She returned very quickly, complaining of feeling very ill, sat down in a chair, and expired. An inquest was held, and the body reported to be perfectly healthy. On the close of the inquest the impregnated uterus was brought to me unopened, as a fine specimen of natural pregnancy. On opening it a portion of clot of blood appeared to view. It had lacerated the chorion to a very slight extent only; but, on removing it from its bed, between the amnion and the chorion (a most singular situation to contain so large an effusion, of which Baudelocque gives no example, but refers to several examples shown him by Professor Deneux,) it was found to weigh four ounces. A slight stain was also observed on the woman's linen, which from its dampness must have been recently produced. She died in a state of syncope. The nervous system must have received a severe shock at the moment of the laceration, for, of itself, so small an amount of blood could scarcely bring life into danger, even in the sitting posture. The sudden uterine distention might have had an important connection with the fatal depression of the action of the heart. The indications of treatment, in cases attended with a large internal effusion of blood, are very simple, viz. evacuating the uterus, and securing its effective contractions. In the form of hemorrhage, termed "accidental," the mere rupture of the membranes is the practice generally pursued, and with marked success—the hemorrhage ceases, and labour presently comes on; but, in an exigent case of internal hemorrhage, the same reliance cannot be placed upon this simple operation. The objections are threefold.

1st. The chance of the uterine contractions, either not coming on, or proving inadequate to constringe the bleeding vessels—a highly probable supposition, considering the mass of the blood which may intervene between the uterus and the membranes.

2dly. The uncertainty of the period of time which elapses previously to contractions arising.

3dly. The impossibility of determining at the moment, whether or not the hemorrhage is arrested, our opinion being regulated entirely by the constitutional symptoms.

Mr. Coley's patient was treated by the rupture of the membranes merely, and the administration of the ergot of rye; pains came on in three hours and fifty minutes afterwards, and the child was expelled by the natural powers. Mr. Coley was deterred from turning the child by "the deathlike state of collapse."

In a case already described, attended with an effusion of 121 ounces of blood, the rupture of the membranes had no effect whatever in producing uterine action, I do not recollect whether or not the ergot was given. Hasty conclusions, derived from solitary cases, are often incorrect, and I would not be understood to say that a case may not occur like Mr. Coley's—the patient being almost *in articulo mortis*—where the milder practice might not be preferable to the sudden evacuation of the womb. Indeed, as I have already stated, Dr. Hamilton's patient died immediately upon artificial delivery. Still, whenever there is reason to believe the hemorrhage is going on, the evacuation of the uterus, by turning the child, should be undertaken at any risk, for it is very probable, that during the time we are waiting for the natural action of the womb, an additional quantity of blood may be gradually pouring out, calculated to terminate life. If this be true, the plug must indeed be a most dangerous remedy in such cases, and yet Mr. Baudelocque recommends it as a temporary measure, provided the os uteri is too rigid to admit of the hand. Nevertheless, he enforces the practice of immediate delivery as early as possible, and happily the os uteri will almost always be found abundantly relaxed for the purpose. Sufficient evidence has been adduced to show you the great danger of all cases like the present, and the inevitable consequences of indecision. Had Mr. Rice been a less thoughtful and cautious practitioner, than he is known to be, his patient would most certainly have perished—for like cases of placental presentation, nature is unequal to the emergency, and art has the pre-eminence. Amidst much that arises to discourage us in the exercise of this most responsible department of medicine, we now and then possess the certain conviction of having been, under Providence, directly instrumental in the preservation of human life—perhaps (as in this case) preserving the life of the mother of many children.

BIBLIOGRAPHICAL NOTICES.

Sir C. Bell's Surgery.[1]

Of the character of the author as a professional writer it is needless for us to speak. His name is inseparably associated with the progress of medical science in the nineteenth century.

The work before us is intended as a guide to the chirurgical student; but it necessarily contains—proceeding from such a source—a great amount of matter most valuable to the practising surgeon. It is under such views, that we have selected it as the first work for the fourth year of the "Library," and accordingly it is commenced in the present number.

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[1] Institutes of Surgery, arranged in the order of the lectures delivered in the University of Edinburgh, by Sir Charles Bell, K. G. H., F. R. SS. L. and E., Professor of Surgery in the University of Edinburgh, &c. &c. 2 vols. 12mo.

MISCELLANEOUS NOTICES.

American Statistical Association.—We are pleased to observe that a society under this title has been lately instituted in Boston—the objects of which are—"to collect, preserve, and diffuse statistical information in the different departments of human knowledge." Institutions of a similar kind in Europe, have led to the collection of a vast amount of important information to the political economist and the physician. As a member—for they have conferred upon us the honour of membership—it shall receive from us every aid and support, and we doubt not that a large mass of valuable materials will be collected, when it is in energetic action.

Jefferson Medical College.—According to the published catalogue, the number of students, during the past session, was 145; whereof there were from Pennsylvania, 49; Virginia, 27; Maryland, 9; New York, 10; South Carolina, 8; New Jersey, 7; North Carolina, 5; Georgia, 4; Maine, 4; Ohio, 3; Alabama, 2; Nova Scotia, 2; Delaware, 2; Connecticut, 1; Michigan, 1; District of Columbia, 1; Missouri, 1; Mississippi, 1; Massachusetts, 1; New Hampshire, 1; Louisiana, 1; Lower Canada, 1; Upper Canada, 1; England, 1; Ireland, 1; Bermuda, 1.

The catalogue is preceded by an address from the board of trustees, in which they speak in strong terms of the wholesomeness and prospects of the school.

Dr. Gerhard.—Resolutions of the Students.—We have much pleasure in publishing the following resolutions in favour of Dr. Gerhard.

A portion of the medical class of the University of Pennsylvania, who have attended the lectures at the Philadelphia Hospital, being desirous of expressing their sense of the value and importance of clinical instruction, and of their obligations to Dr. W. W. Gerhard, for the able course of lectures delivered by him at that institution during the present session, have met together for that purpose; therefore,

Resolved, 1st. That we consider clinical instruction the most important method of teaching the pathological states of the system, and of familiarizing the mind of the student with the means of correcting the aberrations from the standard of health.

2d. That we consider the course of lectures now being delivered on clinical medicine, at the Philadelphia Hospital, of great value, particularly because of the truly scientific as well as practical manner, in which diseases, involved in much obscurity, are elucidated.

3d. That we consider Dr. Gerhard eminently qualified to give instruction in clinical medicine and pathological anatomy, and that we particularly admire his unequalled skill in illustrating the diseases of the thoracic viscera.

4th. That a committee of ten be appointed to present a copy of these resolutions to Dr. Gerhard, and to tender him our thanks for the zeal and ability which he has manifested in the interests of the class.

5th. That these resolutions be signed by the chairman and secretary, and that a copy of them be presented to the Faculty through their Dean.

6th. That a copy of these resolutions be also sent to the Medical Journals and newspapers of this city, with a request that they publish them.

The committee appointed under the fourth resolution, consists of the following gentlemen: Drs. C. Quarles and R. Kownslar, and Messrs. T. B. Lamar, M. A. Page, T. R. Spencer, W. H. Van Buren, Allen Gunn, H.

Selden, T. L. Walker, and J. R. Justice—on motion the chairman was added to the committee.

J. A. Pleasants, M. D., *Chairman.*

L. S. Joynes, M. D., *Secretary.*

Scientific Rewards.[1]—Gold medals, of the value of 1,500 francs each, have been awarded by the Royal Academy of Medicine to Drs. Bright, Martin Solon, and Rayer, for their labours on disease of the kidney; a medal, of equal value, to M. Ricord, for his work on the venereal disease; and the sum of 1,000 francs to M. Martin for improvements in the mechanism of artificial legs.—*Gaz. Méd. de Paris*, No. 1, 1840.

Treatment of Chlorosis with the Lactate of Iron.[1]—The lactate of iron has recently been introduced into practice by MM. Gelis and Conté, internes at La Charité. Reflecting on the difficulty of administering the preparations of iron, these gentlemen recommend the use of the lactate in lozenges. This preparation is very soluble, and may be administered in much smallar doses than other preparations of iron—the subcarbonate, for example. M. Bouillaud never gives more than twenty grains in the twenty-four hours; MM. Andral and Fouquier seldom exceed twelve grains.

The following cases show the effects of lactate of iron in cases of chlorosis:—

Case I.—*M. Andral.*—Josephine Leiter, 17 years of age, admitted on the 23d November last. Seven months ago she was much frightened, and since then her health has rapidly declined. The menstrual discharge became irregular, and of small quantity; appetite lost; the least exercise produced palpitation of the heart and blowing respiration; *bruit de diable* in the carotids.

Twenty days after admission she commenced taking the lactate of iron in doses of six grains a day. On the 10th day her appetite was much improved; the dose was increased gradually to twelve grains. On the 6th of January the catamenia appeared; they were abundant, and the blood was of a good colour. Since then she rapidly improved.

Case II.—*Amenorrhœa.—Chlorosis.—M. Fouquier.*—Caroline Blessodser, 21 years of age, enjoying good health, had always menstruated regularly up to the age of 19, when the catamenia were suddenly arrested by her imprudence in plunging the hands in cold water during the flux. The suppression persisted for 18 months, and was accompanied by all the symptoms of chlorosis. On the 19th mouth the menses reappeared under the use of iron and other emmenagogues, but were soon suppressed again, and remained so for four months.

Present state.—Face puffed; appetite lost; bowels constipated; palpitation of the heart on the least exercise; headach; vertigo; pain and œdema of the lower extremities; *bruit de souffle* in the heart; slight fever.

Nov. 22, (the day after admission). Six grains of lactate of iron.
24. Appetite improved.
26. Headach and fever have disappeared. Eight grains.
29. Appearance of the menses. Ten grains.
30. Neuralgia of the supra-orbital nerve. Twelve grains.
Dec. 4. Appetite good; no palpitation; no vertigo, &c.
6. Discharged quite well.

Case III.—*Chlorosis and Amenorrhœa after delivery.*—A lady, 22 years of age, was delivered in November, 1839. The labour was followed by phlebitis of the lower extremities and well-marked chlorotic symptoms; paleness and tumefaction of the face; palpitations and blowing on the least exercise; gastralgia; suppression of the menses, which had, hitherto, been regular. During the summer the patient went to the country, and became much better; but, on her return to Paris, the symptoms of chlorosis recurred with increased force.

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[1] London Lancet, Feb. 1, 1840, p. 707.
[2] Ibid, Feb. 8, 1840, p. 740.

Dec. 1. Lactate of iron, in the dose of eight grains every day. Three days afterwards increased appetite; in eight days loss of the habitual paleness; in a fortnight the patient was able to take a long walk; and about the beginning of January, 1840, the chlorotic symptoms had completely disappeared. On the 10th, fourteen months after delivery, the catamenia reappeared for the first time.—*French Lancet, Jan.* 23, 1840.

University of Edinburgh[1].—Dr. J. T. Simpson, has been elected Professor of Midwifery in the University of this city, in the place of Professor Hamilton, by a majority of one vote in the town council:—

For Dr. Simpson,	17
For Dr. Evory Kennedy,	16

NECROLOGY.

Dr. Parrish.—It is with great regret that we have to notice the death of this estimable and excellent physician. We hope to be able to give a sketch of his useful career in a future number from the pen of some one who was more intimately acquainted with the particulars than we: in the meantime we cheerfully publish the following tribute to his memory from a society of which he was long a most valuable and energetic member.

Dr. Parrish died at the green age of 63.

At a special meeting of the Philadelphia Medical Society, held on the 19th of March, 1840, the Vice President, Prof. S. Jackson, being in the chair, the following preamble and resolutions were adopted:—

Whereas, it appears to this society to be proper that, upon the decease of an eminent member of this body, some expression of the sentiments of his remaining brethren upon the occasion should be made public: and, whereas, it hath pleased the Divine Providence to remove from this world our late esteemed and beloved member, JOSEPH PARRISH, M. D.: It is therefore,

Resolved, That we have heard with profound regret of the decease of that eminent physician, whose professional skill, humanity, and liberal and just conduct, have long endeared him to us, and to the profession at large in this city.

Resolved, That we deplore the loss of a physician, whose long career in the practice of his art, has been distinguished by the most brilliant success, accompanied by a modesty, and ingenuousness of conduct, which secured to him the affectionate attachment of the medical profession of this city, as well as their highest respect.

Resolved, That a member of this society be requested to prepare and deliver before this body, a biographical account of the deceased, in order that, although his present and living example has ceased from among us, some permanent memorials may be secured, of a life, which has been highly useful to the medical body, by a pure example of morals, by great attainments in medicine and surgery, and by a rare moderation fit to be preserved as the model of a wise, benevolent, and upright physician.

Resolved, That the members of the society wear crape on the left arm for thirty days, as a testimony of their feelings as expressed in the foregoing resolutions.

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[1] London Lancet, Feb. 8, 1840, p. 744.

Resolved, That the members of the society will attend the funeral of the deceased, to-morrow afternoon at 3 o'clock, and that we hereby invite the physicians of this city to meet with us at our Hall, in order to join with us in the manifestation of due respect to the deceased.

Resolved, That a committee of three members be appointed to present a copy of these resolutions to the family of the deceased.

Chas. D. Meigs, M. D., R. Coates, M. D., and Caspar Morris, M. D., were then appointed a committee, to carry into effect the object of the last resolution.

On motion of Dr. Caspar Morris, seconded by Dr. West,

Resolved, That Dr. Geo. B. Wood be respectfully requested to prepare the memoir contemplated in the above resolutions.

On motion of Dr. T. S. Kirkbride,

Resolved, That an account of the proceedings of this meeting be published in the medical periodicals of the city, and in the city morning papers of to-morrow.

EDWARD HARTSHORNE, Junior, Recording Secretary.

March 19th, 1840.

Resolutions expressive of the worth of the deceased have likewise been passed by the managers of Wills Hospital, over whom he had presided since the first organization of the charity.

Since furnishing the above we have received the following:

At a meeting of the former pupils of the late Dr. Joseph Parrish, held at the Hall of the Medical Society on the 21st of March, 1840, Professor Wood was called to the chair, and Dr. Norris appointed secretary.

The following resolutions offered by Professor Morton, were adopted:

Resolved, That we contemplate with feelings of unfeigned sorrow, the demise of our venerated friend and preceptor, Joseph Parrish, M. D.

Resolved, That we regard the death of this estimable man as a severe loss, not only to the medical profession, but to the community at large, and above all to ourselves, who have been instructed by his precepts, and fostered by his kindness.

Resolved, That an intimacy of many years continuance, has tended more and more to enhance our esteem for his many virtues, his amiable manners, and his professional skill.

Resolved, That a copy of these resolutions be presented to the family of Dr. Parrish, with the assurance of our sincere sympathy for the afflictive bereavement they have suffered in his death.

Professor Morton and Dr. Yardley were then appointed a committee to carry into effect the last resolution.

On motion of Dr. Yardley, it was,

Resolved, That this meeting cordially unite with the Medical Society in the appointment of Professor Wood, (one of our number) to prepare a biographical memoir of our lamented preceptor; believing that he will do full justice to his superior ability as a teacher of medicine and surgery, as well as portray his exalted and endearing character as a physician, his worth as a man, and his virtues as a Christian.

Resolved, That we will in a body attend the reading of said memoir at such time and place as Dr. Wood and the Medical Society may select.

On motion of Dr. West:

Resolved, That the proceedings of this meeting be published in the Medical periodicals and newspapers of the city.

GEO. W. NORRIS, *Secretary.*

Baron Richerand.[1]—Baron Richerand, Professor of the Faculty of Medicine, Paris, died on the 23d of January last. M. Richerand was born on the 5th of February, 1779, at Belley, a small town in the department of Aix, which has already furnished the capital of France with some of its most celebrated physicians, Recamier, Bichat, &c. At the age of 17, Richerand left his native town for Paris, where he commenced the study of medicine, and such was the ardour of the young aspirant to distinction, that, after having studied only two years, he commenced lecturing as a private teacher. At the age of 22 he published the first edition of his "New Elements of Physiology." This work has continued, since the time of its publication, to enjoy a high degree of popularity; it has been translated into most of the European languages, even into Chinese, and is well known in our own country through Dr. Copland's excellent translation. Richerand dedicated his work to Fourcroy, and through him became acquainted with the most celebrated characters of the time. He was soon appointed assistant-surgeon to the Hospital of St. Louis, and at the age of 29 became one of the Professors of the School of Medicine. During nearly half a century he continued his labours at the hospital without intermission, and sank at length full of years and honour, loved and respected by all who knew him. M. Richerand was Professor of the Faculty of Medicine, Senior Surgeon of the Hospital of St. Louis, President of the Medical Jury for Paris, and Knight of the Orders of the Legion of Honour, St. Michel, St. Anne, St. Wladmir, &c.

Professor Blumenbach.[2]—died at Göttingen, on the 22d of January, aged 88. Fourteen years ago (in 1826) he celebrated the fiftieth anniversary of his professorship. "For some years, however," says a correspondent at Hanover, "he has been dead to science, so that the University now loses only his illustrious name."

John Frederick Blumenbach was born at Gotha, in the year 1752, and took his degree of Doctor of Medicine at the University of Göttingen in 1775. On the following year he was appointed Conservator of the Museum of Natural History; in 1778, Professor of the Practice of Medicine; and in 1812, Secretary of the Royal Society of Sciences. Blumenbach wrote his inaugural thesis in 1775, on "The Varieties of the Human Race," and thence continued to labour with unwearied zeal in this interesting field of observation. His collection of human skulls was the richest in the world. In the year 1787 Blumenbach published the first edition of his "Elements of Physiology." This work once existed in an English form; now a travestied copy is sold under the title of "Elliotson's Physiology."

BOOKS RECEIVED.

From Dr. Clary, of Syracuse, New York.—Transactions of the Medical Society of the State of New York. Vol. iv. P. 2. 8vo. pp. 56. Albany, 1839.

From the Author.—The American Medical Almanac, for 1840, designed for the daily use of practising physicians, surgeons, students, and apothecaries, being also a pocket memorandum and account book, and general medical directory of the United States and the British Provinces. By J. V. C. Smith, M. D., editor of the Boston Medical and Surgical Journal. Vol. ii., continued annually. 24mo. pp. 152. Boston, 1840. (This work was sent to us by the editor months ago, but only reached us within the last few days.)

From Dr. Woodward.—Medical Superintendent.—Seventh Annual Report of the Trustees of the State Lunatic Hospital, at Worcester, December, 1839. 8vo. pp. 102. Boston, 1840.

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[1] London Lancet, Feb. 8, 1840, p. 741.

[2] Ibid.

THE

AMERICAN MEDICAL INTELLIGENCER.

Vol. IV. April 15, 1840. No. 2.

Art. I.—INHALATION IN TUBERCULAR PHTHISIS PULMONALIS.

BY SIR CHARLES SCUDAMORE, M. D.[1]

As the practical consideration of any new remedy which may be proposed for the relief of disease, must be one of the useful purposes of a periodical journal, I trust that some further observations on the question of inhalation in tubercular phthisis pulmonalis, and in chronic bronchitis, may be offered to you as an acceptable contribution.

It was in 1830 that I published the first edition of my cases in illustration of the subject; and therefore I may lay claim to a very extended experience of this particular method of treatment, and to the consequent opportunity of forming a more mature judgment of its merits. But I wish, in the first place, to be understood as speaking of this remedy in the light of an auxiliary, and one not exclusive of other treatment. It is to be considered that every practitioner, in consenting to adopt this treatment, may at the same time employ those general means in which he is accustomed to confide. I believe that I have derived from this method of practice more success, and a larger share of satisfactory result, even where cure was not attainable, than the majority who have adopted it. This I can only explain from my greater study of the action of remedies administered in the way of inhalation; from my greater confidence in their power and usefulness; and consequently a more patient perseverance in their employment. Yet I do possess a large collection of professional testimony in favour of the inhaling treatment, and some of which I have already published. It is probable, however, that the larger part of the profession may not have paid any attention to it. Some, from theory only, never having made trial of inhaling, or even witnessed its effects, condemn it, as a hurtful irritant to the lungs. Some, on the other hand, also from theory, regard it as a feeble, doubtful, and very troublesome method. Others assure me that they have given a very fair trial to the inhalation of iodine and conium in consumption, according to my recommendation, with eventual failure, as with *all* other means of treatment of this lamentable disease, although at first much pleased with the remedy, and greatly encouraged with the hope of success. There are a few who pass a strong censure on the mode of receiving the medicated vapour by the tubes of the glass inhaler.

I shall endeavour to offer a running commentary on the several points which I have here stated.

I affirm that the inhalation of iodine and conium, so far from irritating the air passages, either in tubercular phthisis or in chronic bronchitis, proves more or less soothing, provided it be used of proper strength, and that inflammatory action be not present;—pleasingly soothing, I repeat, independently of its more remedial power, of which I shall have to speak. Notwithstanding the certain trouble of the process, the patient looks with pleasure to the hour of repeating it, from his confidence of receiving relief.

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[1] Lond. Med. Gaz., Feb. 7, 1840, p. 750.

There may be some of the profession who, having witnessed very untoward effects from the internal administration of iodine, or occasionally, even from its excessive employment externally, dread its use even in the way of inhalation; and, as I now and then read in print, speak of the evils of this potent medicine so employed. But what remedy or treatment, either in the hands of the physician or of the surgeon, would not fall into discredit and even odium, if its merits were to be adjudged from the occasional accidents which arise, whether to be referred to the unfitness of the case, or particular symptoms temporarily existing; to error in the doses or mode of administration; or to idiosyncrasy of constitution in the individual, which renders him an unfair example of the merits of the remedy employed? This position might be illustrated by a thousand examples. Some declare they would endure any pain, or continued loss of sleep, rather than swallow the least portion of opium, having experienced, in their system, its distressing effects. Others, who from a few grains of blue pill have incurred a very severe salivation, would expect death itself to ensue from even a moderate use of calomel.

There are again others who call in question the efficacy of inhalation, and denounce it as a feeble and uncertain mode of practice, inferior to the routine administration of medicines by the stomach. Amidst such conflicting opinions and prejudices, who shall determine the truth?

"Utinam tam facile vera invenire possem, quam falsa convincere."—Cicero.

It might be supposed that time alone would serve to decide the real pretensions of any remedy introduced into general use; but in reality the influence of fashion extends even to medicines; as we have often seen that a favourite remedy, popular alike with the profession and the public, has, after no distant interval, been condemned, discarded, and forgotten. Yet it has again been the fate of several medicines so discarded to return into favour, and enjoy a fresh reign.

It is therefore extremely difficult to discover the truths of physic, and to establish on solid grounds the just claims to confidence which any particular medicine, or mode of treatment, may really possess. Preconceived opinion and prejudice too commonly stand in the place of reason and dispassionate inquiry, and oppose the advance of truth. The dangerous nature of consumptive disease, and its great fatality, should rather serve to stimulate our industry to discover some method of lessening the force of the scourge, than to be passive spectators of its dire results. The high authority of Laennec may probably have had some influence in confirming the general opinion of the incurable nature of phthisis pulmonalis. The distinguished author observes (Forbes' Translation, p. 305):—"The observations contained in the treatise of M. Bayle, as well as the remarks made in the present chapter on the developement of tubercles, sufficiently prove the idea of the cure of consumption in its early stage to be perfectly illusive. Crude tubercles tend essentially to increase in size and to become soft. Nature and art may retard or even arrest their progress; but neither can reverse it. But while I admit the incurability of consumption in the early stages, I am convinced, from a great number of facts, that in some cases the disease is curable in the latter stages—that is, *after* the softening of the tubercles and the formation of an ulcerous excavation."

The attempt, therefore, to treat tubercular phthisis by any novel mode, with the expectation of success, is thought probably to wear the appearance not only of presumptuous boldness, but of the vain pretensions of quackery[1] itself. Far be it from me to speak in any light terms of this fearful disease, or to boast that I have certain means of cure at my command, in any case which may present itself.

I have now enjoyed no short term of medical life, and can well remember the results of different methods of practice in this disease in former years, without any success resulting. For a long period it was a favourite practice to put the patient on very slender diet, perhaps of milk, vegetables, and fruits, exclusively; and especially on the use of digitalis at the same *time*; on the theory of procuring a quiet state of the circulation, and preventing irritation and over-action of the lungs, by keeping the formation of the blood within the narrowest limits, as to its quantity; and abating its stimulating quality also, by lessening the density of its red particles.

Finding the constant failure of this and other modes of treatment, about twelve years ago I first made trial of the inhalation of iodine and conium, not having then heard of any experiment of the kind being made by others. I was gratified by a degree of success which I had never obtained from any other means; and I published some of my results in November, 1830. But great as is the importance which I attach to this one remedial method, I should be sorry to have it supposed for one moment that I would depend on it alone. On the contrary, I am fully aware how essential a matter it is to treat the whole constitution; such treatment being modified according to the circumstances of the individual case. As a general principle, I am an advocate for a very supporting plan of diet, and the use of corrective tonic medicine, combining with it the occasional careful administration of *alteratives*. Good air, the avoidance of vicissitudes of temperature, while, at the same time, a due ventilation is well maintained in all the apartments which the patient occupies, are points of great importance. It is not sufficient that we attempt to relieve the lungs from the irritation of tubercles at present existing; but we must endeavour to remove the tubercular *diathesis*, and counteract the tendency to fresh formation of tubercles. Hence it follows also, that when a consumptive patient may have had the good fortune to be benefited by treatment to the extent of a tolerable recovery, it is incumbent upon *him* to lead a life of exceeding care afterwards, in regard to diet and regimen, clothing, place of residence, and in every material particular relating to health; in order that a relapse may be prevented.

It is a question of the highest interest to consider whether we may not, in contradiction of the gloomy declaration of Laennec, undertake the cure of the early stage of tubercles, with the hope of success? I have, in numerous instances, by means of inhalation, and *combined* treatment, succeeded in removing the early state of tubercular irritation, and which had been clearly manifested by the signs revealed by auscultation and percussion, by great elevation of the animal heat, and by the concurrent symptoms of cough, short breathing after quick exercise, frequency of pulse, hectic fever of greater or less amount, wasting of the body, and loss of strength.

As an example bearing exactly on this point, I will advert to the case which I published in the second edition of my work on inhalation, &c. p. 66. I stated, in the observations on the case, p. 73, that, from the several indications, it was reasonable to believe that tubercles existed. The recovery of the patient under the treatment adopted was most satisfactory. He remained quite well for upwards of a year, and continued so, with a slight exception, for a much longer period, enjoying the sports of the field, and displaying great strength of body in his various exertions. He resided in a distant part of Scotland. But, presuming most imprudently on his state of recovery, he committed excesses at the table, with late hours at night, and carelessness of exposure in the day. Under these circumstances, he was attacked most severely by the epidemic influenza, from which he never fairly recovered. He came under my observation about a year afterwards, when, upon examination, I found, on the upper part of the right lung, the clearest signs of the existence of a cavity. The pectoriloquism was most strongly marked. The left lung was also much diseased. Under a course of treatment he amended greatly; but again having neglected himself, and suffering from a fresh attack of influenza, he relapsed into a hopeless state, although he combated with his disease for a considerable length of time.

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[1] I have occasionally met with observations of this nature applied to myself, with reference to inhalation; but they have always been either deficient in courtesy, or so stamped with scurrility, and vulgarity of style, that they have never called for my serious notice, or more than my silent contempt. Written in the same spirit of low detraction, some letters have lately appeared in the Lancet, doing equal discredit to the head and heart of the writer, respecting the London Dispensary for the diseases of the lungs. The prosperity of the institution will be the best refutation of such puny attempts to injure either the charity itself, or its medical officers.

Is it not evident, from the indications by auscultation, as well as from the physical symptoms stated in the work referred to, that the right lung was tuberculated when I began the treatment in March, 1830? and that the remedies removed all irritation of the lung? For, according to his own cheerful letter, six months after, he described himself as strong and fat, and without cough. Whether absorption of tubercles had taken place, or a change in their condition been produced, or that the state of the lung was so altered as no longer to be irritated by the tubercles as foreign bodies, would be matter of theoretical speculation. It will, perhaps, be said that it was not a recovery, because he afterwards died from the disease: but he did enjoy a long season of health; and, had he led a prudent life, might probably have avoided the subsequent danger which he incurred.

The lady, whose case I relate at page 138 of the work before mentioned, is at the present time enjoying very comfortable health, and her lungs, as I had lately the opportunity of ascertaining, are quite free from all signs of disease. Nine years, therefore, have elapsed since the period when I first visited her, and found her in the state which I described at the time in the following words:—"She was very much emaciated, was so extremely weak, with such hollowness of cheeks, and such looks of sinking, that my first impression was that of distress from the apprehension that the case was beyond the reach of any medical treatment. The pulse ranged from 120 to 130, and was occasionally more frequent; the cough was violent, and so peculiarly harassing at night, that the sleep was constantly disturbed. The expectoration was difficult, partly coloured with blood, the whole of a very puriform appearance, and in quantity about four ounces in the twenty-four hours. There were morning and evening accessions of hectic fever. The night perspirations were so profuse, as completely to saturate the sheets with moisture. She was so reduced in strength, that she required to be carried from the bed to the sofa in the adjoining room. At the upper part of the right lung there was pretty well-marked pectoriloquism and strong *gargouillement.*"

This quotation from my narrative of the case will be sufficient to show its great importance, and the value of the treatment. Fortunately for my exertions, this lady, distinguished in her character by every estimable quality, possessed that first of virtues in a patient—entire obedience. She did complete justice to all my recommendations, and was eventually rewarded with a return of health.

The patients, whose symptoms of tubercular phthisis, with the treatment, were fully described in this Gazette, beginning at page 720, vol. xv. have not had any relapse, and are now enjoying excellent health; a period of rather more than five years having elapsed.

In the following case of a young lady, aged 24, whose sister had died from consumption, the inhalation of iodine and conium rendered the most satisfactory relief, and lasting benefit.

In the history which she gave me of her case, she stated that, in the year 1830, she had fallen into a very delicate state of health, in consequence of a chest complaint. She went abroad, in the hope of re-establishing her health; and which object was in great measure effected by residing five months at Nice. Yet, living again in England, she experienced a relapse of her disorder in 1832; and such was the delicacy of her chest, that any slight exposure to a damp or cold atmosphere was almost certainly followed by pulmonary disturbance; her symptoms being, shiverings, succeeded by heat of skin and perspirations; cough and shortness of breathing; with a general soreness of the chest, and a sense of constriction, attended with debility and great depression of spirits.

Under such circumstances, I was consulted; and, upon examination of the chest by auscultation and percussion, I had the clear evidence that the upper part of the right lung was much tuberculated; but on the left side the respiration was natural, with the exception of some slight rales. I adopted my usual plan of treatment, the particulars of which I will not detail. The result was most satisfactory. My patient described that she "felt from the inhaling a soothing and healing effect; soreness and pain were soon removed; and she became sensible of a freedom and expansion of the chest to which she had long been a stranger. The relief which she experienced gave her the idea of long-closed valves being re-opened and set free." After a few weeks, all the troublesome symptoms passed away. By pursuing a careful system of management, medical and dietetic, and paying strict regard to regimen, this young lady regained her health; and, I have every reason to believe, has continued well.

In the beginning of June, last year, I was consulted by a gentleman, aged 35, long an invalid from pulmonary disease. He had resided many years in the West Indies, from whence he came in what he felt to be a hopeless state of suffering. I found him in bed, too weak to leave it. There was an assemblage of the most urgent symptoms; a frequent and very weak pulse; the animal heat 99;[1] urgent cough, with difficult expectoration of an offensive puriform sputum,[2] occasionally coloured with blood; the chest much oppressed, and the breathing quick and uneasy on the least exertion, with occasional pain in the sternum and intercostal muscles: he had hectic fever, and night perspirations, which were not only profuse, but of a peculiarly faint and disagreeable odour. Sleep slight and unrefreshing; without appetite, and the functions of the liver unhealthy; much reduced in flesh, and having coldness, and considerable œdema of the ancles and feet. At the upper part of the right lung there was strongly marked pectoriloquism to a great extent, with *gargouillement*, indicating extensive cavity; the respiration almost wholly bronchial, with sibilant rales. On the left side the respiration was imperfect in some parts, in others puerile, and there were occasional rales, but without pectoriloquism. Percussion confirmed the signs of tubercular obstruction in each lung, but especially in the right, which was scarcely in the least degree capable of its functions. The right side of the chest was flatter than the left, and rose but little in a forced inspiration. His mind was in a state of the utmost despondency; and, contrary to that buoyancy of hope which prevails in acute phthisis especially, but often also in chronic, he had a fixed persuasion that he should not recover.[3]

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[1] Without exception, I have always found a high degree of the animal heat in tubercular phthisis; showing, as I conceive, a specific irritation present, allied to inflammatory action, yet different from true inflammation.

[2] The nature and quantity of the sputum, is highly instructive, as regards the disease in its seat, stage, and intensity.

[3] Apart from the great consideration that we are all in the hands of a Superior Power, and cannot know when we may be called away, we do see, as medical observers, the extraordinary difference in the strength of the vital principle, if I may so express myself, in different individuals. Some yield their life to apperently slight assaults of disease; while others recover under circumstances seemingly the most hopeless. Such curious results should, I grant, render the physician very modest in the boast of his

The physician who had been in close attendance for six weeks, apprehended a fatal termination of the case. The limits to which I think it necessary to confine myself on the present occasion, will not allow of minute details in my account of the treatment. The patient inhaled the mixture of iodine and conium regularly three times a day, at first for ten minutes, afterwards gradually increased to twenty; small blisters were applied to the chest from time to time; the lotion of tannin infusion, with acetic acid and Eau de Cologne, was applied night and morning to the skin, followed by the use of the flesh-brush. Internally, pills composed of pilula hydrarg. camphor, and c. colocynth extract, were given at night, occasionally, followed by a morning aperient draught; a strong infusion of the cortical part of sarsaparilla, with alkali and gentian, was used twice in the day; and, to procure comfortable sleep at night, he took a soothing morphine syrup, acidulated with diluted sulphuric acid. The plan of diet was changed to one highly nutritious; and such was the langour and debility, that wine, the best port and sherry, was allowed with more than usual freedom. He usually took three or four glasses in the course of the day, in addition to a pint of sound draught porter, not only without disagreement, but with every sense of benefit. He had sometimes alarming attacks of exhaustion, at the commencement of my attendance; and he had indeed said that he was "dying from inanition." After a few weeks, iron and quinine were administered in conjunction, instead of the other medicines.

So beneficial was the whole treatment, that, in rather more than a fortnight, the specific symptoms were most materially relieved, and the strength and spirits were greatly regained. The night perspirations had nearly ceased. As a proof of the amendment of the lungs, he could, in the beginning of July, walk two or three miles, at a quick pace, without resting. He improved progressively. In September he travelled. I saw him again at the end of November, and found a remarkable diminution in the extent of the pectoriloquism, with an evident amelioration in the condition of each lung. The rales had ceased; and by auscultation[1] there was satisfactory evidence of a very improved respiration. The expectoration continued, but was much lessened in quantity, and almost free from its former offensive odour. It appeared to me that the tubercular cavity was in a favourable progress of healing; and certainly the whole aspect of the patient was promising for a fair recovery; for, to regain perfect health could not be expected, when so much disorganisation of lungs had been produced existing in conjunction with an unhealthy liver. In my early attendance, I was struck with his cadaverous and dark complexion; and this unfavourable omen disappeared in a few weeks. He related to me that at various periods he had experienced slight hæmoptysis. Under my own observation, in about seven weeks from the commencement of my attendance, he used a warm bath, not exceeding 96° in temperature, and was remarkably refreshed by it; but on the same evening hæmoptysis occurred; half an ounce of pure red blood issued with a cough. This hæmorrhage I attributed to the excitement which the circulation had received from the bath. It is satisfactory to state that on no occasion did the inhalation give rise to this accident;[2] and he always felt more or less of sensible relief from it. This and other treatment was continued, with occasional intermissions, during five

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art, and make him study nature the more attentively, that he may have acquaintance with all her ways.

[1] I may take this opportunity of mentioning that I derived considerable assistance in auscultation from placing a sheet of writing paper over the chest, and listening through this medium.

[2] I have at present under my care a lady, who, in the course of her illness, before I was consulted, had frequent attacks of hæmoptysis, which have not been reproduced by inhalation. In case of hæmoptysis, whatever the exciting cause might be, I should suspend the inhaling till the disappearance of any blood. This patient has tubercles and a cavity. Her amendment has exceeded my most sanguine expectations.

months, when he had regained flesh and strength; could walk six or eight miles in the day; and felt himself sufficiently recovered to return to the West Indies, for a period necessary to arrange his affairs.[1]

It has been my purpose to show that, in all the stages of tubercular phthisis, it is our duty to enter upon a more or less active systematic plan of treatment, and that we do so with less discouragement of success than Laennec and others have taught. Yet no one can be more aware than myself of the danger of this disease, and its too frequent mortality under every care and exertion to ward off such a termination. I always wish, therefore, to be understood as speaking of the cure of consumption in a very guarded and qualified sense. I can truly declare that I have had the gratification of very often succeeding in bad cases, where, according to all my earlier professional experience with other treatment, I should have failed.

I am not only convinced of the excellence of the remedy—the inhalation of iodine and conium—but also of its superiority, as a curative agent, over chlorine and creosote; yet, I must again observe, "let it not be imagined that I limit myself to this treatment, which I would rather speak of as a most valuable auxiliary, than as the sole means of benefit." It is incumbent on us to look comprehensively to the state of all the constitutional functions; to attack the tubercular diathesis; to control to the utmost of our power the nutritive functions, from the first digestion of the food in the stomach to the succeeding processes of chylification, lacteal[2] absorption, assimilation, and sanguification; and to effect a change in the whole mass of blood. With this large view, we are required to combine, with the strictly medical treatment, a precise plan of diet and regimen; of exercise in the open air,[3] in a manner adapted to the patient's state, in the favourable season of the year; and, in weather precluding out-doors exposure, to direct the arrangement of a medium rather than a high temperature of the apartments, always paying great attention to their fit ventilation. And shall the execution of such pathological and practical views be termed empirical, and without claim to respect?

I know that, in a very large proportion of cases of consumption, there must be eventual disappointment to our hopes; but of this fact I am certain, that it is generally in our power to palliate all the sufferings; to afford very great relief; and to prolong life. It unfortunately happens, and this it has been greatly my fate to experience, that the disease has arrived at its last stage, and when extreme disorganization of the lungs has taken place, before an active plan of treatment has been adopted; so that the opportunity of rendering material benefit has been irrevocably lost. The disease does, indeed, often effect its march most insidiously; and danger is present almost before the sense of illness is felt, or at least acknowledged.

I have, on different occasions, entered my protest against sending the unfortunate patient, as is so commonly done, in a confirmed state of the disease to a warm climate; trusting for benefit almost, perhaps wholly, to its influence. This usually proves a journey to a foreign grave. Rather let us, however late the attempt, and with however poor a prospect of success, enter upon the attentive treatment of the case; and of which, according to my views and experience, inhalation will prove a most valuable part. Here let me again ask, whence the objection? All other means in which medical confidence may be placed may be equally employed without any deduction of benefit from the use of inhalation, which, in theory, from its being a direct application of a potent remedy to the seat of disease, so much recommends itself; and from which I am confident more or less of benefit will always arise. I am quite sure that every practitioner, in the treatment of a consumptive case, feels the anxious and difficult ground on which he treads, and may be well pleased to add to his expedients any one remedy uniting in itself efficacy and safety. I will not attempt to say what proportion there may be, but I regret to admit it must be large, of the cases of true tubercular phthisis which eventually resist all power of medical skill. Yet, is this a reason for supineness and indifference in the mind of a physician? As in all difficulties, let us increase our exertions in proportion to the obstacles which we meet. It is not the reproach of good remedies that they cannot heal immedicable wounds!

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[1] This gentleman was staying, during my attendance, at the house of Mr. King, Surgeon, Portland Terrace, St. John's Wood, who can bear full testimony to my account of the case. To his kind care and attention the patient was much indebted.

[2] The idea of an unhealthy action in the mouths of the lacteals, was first submitted to my consideration by Dr. Sherriffs. To the loss of their peculiar sense of discernment between organizable and disorganizable matter, and the consequent indiscriminate absorption, he attributes all tubercular disease.

[3] The use of that most valuable apparatus, the respirator, in certain states of the atmosphere, is very important.

I cannot, I think, too often repeat, that, while I claim for the inhalation so great a regard, I consider it to be only one part of the treatment required. The additional constitutional means embrace a very wide consideration. The local external treatment of the chest by proper means of counter-irritation, and by lotions and frictions, is a very important part of management.

I have never seen, from an active remedy, so large a proportion of benefit with so small a proportion of disagreement and inconvenience, as from the inhalation of iodine and conium. The method also is to be considered: and I may here remark, that many excellent remedies have fallen into odium and neglect, at different periods, from the error or abuse of their application. I am careful that all the ingredients which enter into the composition of the inhaling mixture are perfectly pure.[1] I recommend the following formula:—

℞ Iodinii puri; Iodid. Potassii, aa. gr. vi.; Aquæ distillat. ℥v. ʒvi.; Alcoholis, ʒii. M. fiat mistura, in inhalationem adhibenda.

I now always prefer to add the conium at the time of mixing the iodine solution with the water; and it should be a *saturated* tincture, prepared with the most genuine dried leaves. In the commencement of the treatment I advise very small proportions of the iodine mixture; for example, only from half a dram to a dram for an inhaling of eight or ten minutes, to be repeated two or three times a day. Of the soothing tincture, I direct half a dram—which I usually find sufficient; but it may be increased if the cough be very troublesome. I soon augment the quantity of the iodine, and progressively from ʒj to ʒiv; but also, then prolonging the time of inhaling, I divide the iodine dose, putting two-thirds at first, and the rest after the expiration of seven or eight minutes. If the temperature of the water be measured by the thermometer, it should be 120° Fahr. as being the most favourable for volatilising the active principles of the iodine and conium, mixed with some watery vapour; but the approximation will be sufficient, if equal parts of boiling and cold water be used; with which the inhaler is not to be quite half filled. Invariably, however, care should be taken to prepare the bottle for this heat of water, by first washing it out with some tepid water.

During the process, the inhaler should be kept immersed in a jug, containing water of rather higher temperature than 120.°

It is of the utmost importance that the strength of the inhaling mixture should be considered in relation to the particular case;[2] the feelings of the patient will be a great guidance. He should have the sense of relief, and not of inconvenient irritation, produced. The cough arising occasionally during the process is not an objection; but if it be more irritable afterwards, it shows that it has been used too strong. There is a certain stage of the tubercular disease, when over-excitement, from employing the iodine in too great quantity, might hurry on the softening process too quickly. It is here that the treatment demands the greatest judgment. In every case one of the following events may be expected to happen: either that the tubercular irritation will be arrested and gradually removed, be arrested and suspended, but not cured; or pass on to the softening process, which terminates in the production of an excavation. In all these different states of disease I advise the inhaling treatment to be employed.

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[1] The various medicines to be used for inhalation may be obtained in perfect purity from Mr. Garden, Oxford street. Many other chemists, without doubt, also have the articles in question correctly prepared.

[2] In acute phthisis, the inhaling doses should be very weak. No remedy with which I am acquainted exerts so much influence over the hectic fever, used in the intervals, as the inhalation in question.

I have formerly mentioned that at the period when I was preparing my first edition for publication, in the year 1830, Dr. Murray, of Belfast, in a treatise on animal heat, recommended the introduction of iodine to the lungs, diffused through warm aqueous vapour into the apartment; and hence it follows that without any communication—for I had not the pleasure of his acquaintance—we had thought of the same remedy; but I am well persuaded that the only certain and exact mode of employing it is by direct inhalation, so that the dose is defined; whereas, in the other mode, many circumstances must interfere with its regularity. Also I find the remedy infinitely improved by the addition of the conium.

In the Medical Gazette for April 6, 1839, we find a paper by Dr. Corrigan, of Dublin, recommending, as a mode of inhalation, the impregnation of the atmosphere of the apartment with iodine vapour, by a mode different from that of Dr. Murray; but the principle is of course essentially the same. I am gratified with the favourable testimony which this physician bears to the remedial influence of iodine vapour in phthisis pulmonalis; but I am not disposed to choose his method of employing it. The volatility of the iodine would cause the vapour to ascend to the highest parts of the apartment;[1] it would attach itself to the linen furniture, and must, of necessity, find its way to the lungs of the patient in a very uncertain degree of strength. The objections of Dr. Corrigan and others to the direct method of inhaling which I recommend, is without foundation. It does not, as they state, cause irritation *to* the larynx and air-passages; but, on the contrary, its influence, if used of the proper strength, is soothing and agreeable. The addition of the conium divests the iodine of that irritating effect which would arise from its penetrating acrid qualities when used *per se*.

But we have a higher purpose to fulfil than the mere study of soothing the mucous membrane of the air-passages. The modus operandi of remedies is a question of secondary importance to their real effect, and may lead to endless controversy. It is my belief that this direct and very accurate mode of applying this powerful medicine, iodine with conium, induces a new action in the vessels and nerves of the lungs, which is calculated to supersede the diseased action. I also assign much effect to the stimulation of the absorbents, and have been led to believe that tubercles have in this manner been actually removed.

As the *mode* of conducting the inhaling process is of such sovereign importance, I shall be excused, I trust, if I enter at some length into this part of the subject.

Dr. Harwood, of Hastings, has lately published an account of the benefits to be derived from inhalation, in which he recommends his newly invented tin inhaler, stating, as the ground of preference over the glass inhaler commonly in use, that it is used with such perfect facility as to prevent fatigue; and, what I must admit, that it is not liable to be broken. I have carefully examined the action of this inhaler, and must take the liberty of offering the following criticism. The ingress tube not dipping into the water, the fresh atmospherical air which enters when the patient inhales, cannot be more than slightly impregnated; and any one making a comparative trial with the glass inhaler, is at once made sensible of the great difference in the strength of the inhalation, from equal quantities of the ingredients used. Indeed this great defect in the construction of the apparatus will apply to any kind of medication of the water. As regards the use of iodine and chlorine, the objection of the metallic nature of this inhaler is a fatal one. I find that an action immediately takes place between these peculiar medicines and the tin, which weakens their properties very considerably. With the requisite alterations in the ingress tube, this will be rendered a very useful inhaler, when it is desired to employ herbs, or gums; water of a higher temperature than 120° being mixed with such articles to bring out their volatile principles; although the patient should wait the reduction of such temperature to the proper degree, or he would be injured by the direct application of so much heat to the sensible surface of the air passages.

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[1] Nor is the great *waste* of the iodine a slight objection to this method. The author states that in the use of the apparatus, "about six drams of the tincture of iodine will be evaporated in an *hour*; and when he has it at work, as he says, "from eight to twelve hours out of the twenty-four," it would form no small item of expense, employed in a charitable institution!

I have not been able to pursuade myself of the advantage of the crescent-shaped mouth-piece in Dr. Harwood's inhaler, over the flattened one of the glass tube.

With a well construeted glass inhaler I find all the satisfaction I can desire. The bottle should be large, and the tubes capacious. The one issuing from the bottle should be upright, passing off in a gradual slight curve, so that the vapour shall not be much cooled in the course of its progress; the ingress tube should dip very near to the bottom of the bottle, that all the air so introduced may receive impregnation. The patient must be desired to inhale by using at the same time suction and a pretty full inspiration, then to drop the under lip from the mouth-piece and make a free expiration; so conducting the process by pausing, and, if he like, little suspensions, in order that he may not experience any of the fatigue, which would certainly happen if breathing quickly, or using an inhaler with small tubes, or with too much water in the bottle.

A little practice also improves the power of the respiratory muscles so that any little difficulty, which may by possibility be felt at the first by a very delicate and nervous individual, is soon overcome. When care is used to prepare the inhaler properly, the accident of fracture is easily guarded against. With respect to the influence of other medicines used in this way of inhalation, I beg to refer the reader who is curious on the subject, to the second edition of my cases in illustration.

Thus I hope to have made a useful addition to my former statements of the importance of the inhalation of iodine and conium in tubercular phthisis, as constituting one most valuable part of the systematic plan of treatment which I recommend; and if I should ever have appeared to speak of it as the sole and exclusive remedy to be employed, and to be used empirically, I have not done justice to myself, and to my enlarged views of the pathology and treatment of consumption.

Did I not feel the necessity of restricting myself in the discussion of my subject in this letter, I could much increase the evidence of the success of the treatment which I wish to advocate, by the relation of numerous cases of great amendment, or recovery, from tubercular phthisis in its different stages. I might also bring forward instances of relief and cure of various conditions of tracheal and bronchial disease, effected by means of inhalation and combined treatment.

I will, however, now conclude by observing, in the language of the poet, to the enemy of the inhaling practice, if such there should continue to be,

> "Si quid novisti rectius istis,
> Candidus imperti: si non, his utere mecum."—Horat.

In the treatment of tubercular phthisis, so much the most mortal of all diseases, no one need apprehend that he shall add unnecessarily to his means of giving relief.

I am, sir, your obedient servant,

Charles Scudamore.

Wimpole street, Feb. 3, 1840.

For the American Medical Intelligencer.

Art. II.—ON THE INFLUENCE OF OXYGEN IN VARIOUS PHYSIOLOGICAL ACTS.

BY WILLIAM B. WALLACE, M. D.

Lawrenceburg, Kentucky, March 20, 1840.

Dr. R. Dunglison.—

Sir,—as a constant reader of your very valuable periodical, to which my partner Dr. Dedman, of this place, is a subscriber, I have looked with interest in it to see some treatise on the defective and excessive aeration of the blood, as connected with the pathology of disease. My attention was first called to this subject in noticing the astonishing increase of muscular power which is produced by the voluntary inspiration of the largest quantity of air which the lungs will contain. It is tested in lifting heavy bodies, such as that of a full sized man. The person to be lifted will place himself in a horizontal position, and two men, one on each side, will endeavour to raise the body in the usual manner, or without inflating the lungs. They will find that it requires a considerable exertion. Then, at a given signal, each lifter will simultaneously inspire as much air as the lungs can contain, and after breathing repeat the process twice. At the last expiration, by preconcerted signal, they will endeavour to lift the body on the *points of their fingers;* and it will generally be raised with nearly as much ease as a body not weighing one fourth of its weight lifted in the customary manner. To the complete success of the experiment, it will be proper for the lifters to place their fingers in positions most suitable to balance the body, and the person lifted to exert the extensor muscles to prevent flexion of the limbs. In this manner I have seen the body of a man weighing two hundred pounds, lifted with ease, long before Sir David Brewster's letter to Sir Walter Scott on this subject, in which that learned chemist (to the disgrace of philosophy) classes the experiment among his cases of "*natural magic*," or, as I understand him, a phenomenon inexplicable on philosophical principles. In delivering a course of lectures at Dayton, in Ohio, I ventured to explain this "*natural magic*" illusion, by assuming that the great ease with which the body was lifted, was occasioned by the stimulating effects of the increased quantity of oxygen imbibed by the blood, and acting directly on the brain and nervous system—thus increasing proportionally the muscular power. A gentleman present, who, perhaps, like Brewster and Scott, had a *penchant* for the marvellous, objected to the theory, and insisted that to the success of the experiment, it was necessary that the person lifted should also make full inspirations. Some of the gentlemen then tested the principle by lifting inanimate substances, and found the effects of increased respiration equally remarkable in those cases.

When we reason by analogy, on the remarkably sudden and almost entire deprivation of muscular power observable in those who descend into an atmosphere of carburetted hydrogen, [?] which is sometimes found in the bottoms of wells, &c., and by which the system is deprived of the necessary stimulus of oxygen, it seems to me a matter of no astonishment that when, by a voluntary increase of respiration, four or five times the usual quantity of air is inhaled, and the imbibition of oxygen thereby proportionally increased, that there should be a corresponding increase of its stimulating effect upon the muscular power. As connected with this subject I will refer to the circumstance which is a matter of common observation, that persons who are about to make any great muscular effort, as in lifting, &c., involuntarily make a full inspiration before the exertion. I will merely add, that by voluntarily increased respiration the production of animal heat seems to be also increased, as I have often in very cold weather whilst lying in bed practised it successfully for this purpose.

As the subjects to which these hints relate have not been treated on by any authors whose works have come under my observation, I have thought proper to make them, from a desire that others, more competent than myself to investigate, may be induced to direct their attention to this unexplored field of philosophical research, and am very respectfully your obedient servant.

William B. Wallace.

[The subjects, to which our correspondent attracts attention in the preceding paper, have received more attention than he is aware of. The experiment of raising the human, or any inanimate body on the tips of the fingers, by a joint and simultaneous effort, was tried, years ago, most philosophically in this city, and it was clearly shown, that muscular or animate force was not necessary for the result; but that it could be produced equally well when a simultaneous effort was made by any of the ordinary inanimate mechanical powers. It was but requisite that they should be exerted together, and at once, in order that surprise should be elicited as to the comparatively trifling amount of force that was demanded. We do not think, that Dr. Wallace's hypothesis of the power-communicating influence of oxygen will stand the test of examination. We take in a full inspiration to fix the chest, before we make use of exertion with the muscles that arise from it and pass to the arm. These matters, however, as well as the influence of respiration on calorification, our correspondent will find discussed in the second volume of the Editor's "Human Physiology."

We may add, by the way, that Sir David Brewster meant by "Natural Magic," not "a phenomenon inexplicable on philosophical principles," but one which, seeming to be magical, *is* explicable on those principles.—Ed.]

BIBLIOGRAPHICAL NOTICES.

Report of the State Lunatic Asylum at Worcester, Mass.[1]

The whole of this report has the same excellencies that were possessed by its predecessors; and its perusal renews our regrets that Pennsylvania is not yet possessed of so admirable an institution as the one from which it emanates. Dr. Woodward deserves great credit for his able annual contributions to the official reports, and for the zeal and intelligence which they exhibit him to possess as the medical superintendent. We feel satisfied, however, that his notions in regard to the causes of insanity are not as historically accurate as he conceives them to be; and that too extensive an agency is assigned to one secret vice, on which we had occasion to express our sentiments in the 2d volume of the "Intelligencer," p. 340.

[1] Seventh Annual Report of the Trustees of the State Lunatic Hospital at Worcester, December, 1839. 8vo. pp. 102. Boston, 1840.

The tables contained in the report before us are highly interesting. In table xii. 418 cases are recorded as having been admitted before insanity had continued *one year*—of these, 370 or nearly 9 in 10 have recovered; 48 failed to recover; 34 remain in the hospital, and 17 have died.

There have been in the hospital 161 cases—of duration from *one* to *two* years; of these, 96 have recovered or are curable, and 64 have failed to recover, or have died.

There have been 411 cases in which the disease had existed more than *two* years; of these, 72 have recovered; and lastly, of 247, who had been insane over *five* years, only 19 recovered.

Table xiv. exhibits the unlooked for fact, that in this institution those over 40 years of age recovered in greater proportion than those under 40.

Table xvi. estimates the number of cases of insanity induced by intemperance at seven and a quarter per cent.

Table xvii. is interesting, and its object will be borne in mind, we trust, in future. The influence of the moon on the insane we regard to be a mere popular superstition, and as such have always denounced it. (Elements of Hygiène, p. 158. Philad., 1835.) Dr. Woodward's results—to use his own language—"are far from establishing the common opinion, that excitements come at the full moon."

Prof. T. D. Mitchell's Address to the Medical Graduates of Transylvania University.

The valedictory of Prof. Mitchell is appropriate; and many of his inculcations are eminently worthy of being treasured up by his young auditors. The profession to which we belong is elevated and noble; how much responsibility rests upon its members not to sully its fair banner; yet how often have we to deplore the obliquities of some of them. Nor is this surprising. The portals of the professional edifice are wide and the entrance easy—too easy. Many ill-educated—we use the term in the enlarged sense—individuals are consequently admitted; and liberal and liberalizing as is the study and practice of our calling, it cannot make amends for deficiencies of early breeding, prevent the incursion of uncharitableness, or correct deep-dyed moral obliquities. It was judicious, however, in Professor Mitchell to attract the attention of his hearers to this important topic.

"Gentlemen, you are not about to mingle with the world, as physicians only, but also as members of society; and I feel it to be my duty to press upon you, in the *third* place, *the great importance of established and correct principles of action.* I am aware, that too many graduates in medicine, place a low estimate on moral tactics; but you may rest assured, that the right observance of these is essential to your true respectability, in every civilised community. It can hardly be expected, that our profession will ever be without bears, and hyenas, to provoke the odium and slander of the censorious. But this should never be allowed to derogate, in the least, from the importance of those traits, which dignify the possessor and bless society. I would fain impress upon you, as a truth, not to be nullified by the lapse of time, that each one of you, will be just what your principles of action shall make you. These, and these alone, will stamp your character, indelibly; they will move every purpose, guide every step, bless or curse. You cannot be ignorant, that nine tenths of the discord and strife prevalent in the medical profession, in all countries, is the fruit of base principles of action, and it is therefore of the last importance, that you resolve to start in the race, for honourable success, under the guidance of just and proper views. The most valuable of these, I hold to be, an unflinching adherence to moral rectitude and duty.

"A distinguished writer observes, that 'the principle of unyielding rectitude is commended by the fact, that it is of *invariable* and *universal application.* It changes not with times and circumstances; is the same yesterday, to-day and forever. It extends to all beings, to all actions; binds the beggar and the prince, the man of learning and the illiterate. Nor is it a rule so difficult of observance, as many suppose.'

"To know what is right, is, in nineteen cases out of twenty, by no means difficult; but the temporising man finds it exceedingly perplexing, to decide what will best promote present interest or popularity. False principles rarely fail to involve their possessor in perilous straits, from which his ingenuity and management do not always extricate him. His path becomes, every day, darker and more tortuous, and his life is a constant state of suspicion and apprehension. Conscious of his own aberrations, and the glaring obliquity of his moral sense; aware that habit has made it a kind of second nature for him to misrepresent, and give a false colouring to every story, and stung to the soul with a conviction that he is held to be void of integrity, he seeks relief from the upbraidings of conscience, by incessant efforts to impugn the motives of others, and to stain their characters with the peculiar dye of his own. And although such individuals do seem, occasionally, to be successful, in accomplishing their purposes, yet truth will not bear concealment long; and, bursting out at length like the swelling torrent, drives before it the worthless and the vile, and scatters their machinations to the winds. Such, gentlemen, are the persons who are perpetually disturbing the tranquillity of our profession, and their dereliction is always the result of a gradual, but continued departure from the straight path of moral rectitude.

"How different is the man, who aims at the strictest moral honesty! To bend his principles to his interest, never enters into his calculations and forms no part of his policy. His course is straight forward, open, plain; and when once fully convinced of the path of duty, he swerves not, through fear of consequences, but comes up fearlessly to the mark, with an honest front and a fixedness of purpose, that cannot be intimidated.—And, what though, for a season, he be less successful in business than his unprincipled neighbour, whose code of morals is sufficiently pliable, to suit the entire range of character around him! Suppose the latter scruples not to violate the dictates of conscience, to trample on the rules of honesty, and to laugh at the idea of fair dealing, and as a result to attain wealth and distinction; admit it all. But mark the real estimate of his character among the virtuous, and calculate, if you please, how much peace of mind he enjoys. His pillow, perhaps, is full of thorns; it may be, that his children grow up to curse him, and his ill-gotten riches prove his ruin.

"Be assured, gentlemen, that if strict integrity be not always the shortest way to success and respectability, it is ever the most certain, the happiest and best. He who makes unbending rectitude his motto, may experience difficulty in his efforts to get business, in the midst of dishonest competitors and rivals. But, mark his course; though slow in ascending the rugged steep, he gains, at length, the lofty summit. Around him gather the warmest patrons, the most substantial friends, and he rises steadily in the confidence of all who know him. Nor is this all. He respects himself, for he has a conscience void of offence. He feels that the motives by which he is governed, are right and safe; and he escapes the self-degradation which the unprincipled man, sooner or later, realizes as the consequence of his unworthy course. And if he fail to accumulate a large fortune, he feels that he has gained a more substantial portion. For while it continues to be true, that riches take to themseves wings and fly away, it is equally certain, that the path of the just man is like the dawning light, that shines brighter and brighter, till the splendour of perfect day bursts upon it."

MISCELLANEOUS NOTICES.

Clarendon Springs, Vt.—A pamphlet, by Dr. Joseph A. Gallup,[1] draws attention to those springs, which are situate in the town of Clarendon, Rutland county. Their composition, as given by Mr. Hayes, of Roxbury, is as follows—carbonic acid gas, azote, carbonate of lime, muriate of lime, sulphate of soda, and sulphate of magnesia—the saline matter being only 5.75 gr. in the gallon. They are admitted to "contain no sensible properties over those of other simple, pleasant waters." A trial of these "gaseous waters" is suggested by Dr. Gallup in phthisis pulmonalis, and in the slow typhoid fever of the region "and of Europe!" We doubt not, that if patients, labouring under various chronic ailments, were *sent* to the springs, that good effects might result, but a question might still arise as to whether any portion of the benefit was owing to the waters.

Transylvania University.—Medical Department.—The annual announcement contains the names of 257 students; of whom 117 were from Kentucky; 35 from Tennessee; 25 from Alabama; 13 from Georgia; 10 from South Carolina; 12 from Mississippi; 8 from Indiana; 7 from Missouri; 7 from Ohio; 5 from Virginia; 3 from North Carolina; 3 from Illinois; 3 from Pennsylvania; 2 from Louisiana; 2 from New York; 1 from Maryland; 1 from Michigan; 1 from Wisconsin; 1 from Arkansas; and 1 from Texas.

The number of graduates at the last commencement was 62.

Notwithstanding the new and flourishing school at Louisville, the students in attendance this year at the Transylvania Medical School are more numerous than they have been since the session 1835-6.

Medical College of South Carolina.—This prosperous institution numbered 194 students, during the last session, of whom 133 were from the state of South Carolina; 32 from Georgia; 15 from North Carolina; 11 from Alabama; 1 from Mississippi; 1 from Florida, and 1 from Virginia.

The number of graduates was 65.

University of Pennsylvania.—Medical Department.—The number of matriculates was 444; of whom 24 were from Alabama; 2 from the British Provinces; 2 from the District of Columbia; 7 from Delaware; 17 from Georgia; 2 from Ireland; 1 from Illinois; 2 from Indiana; 2 from Kentucky; 5 from Louisiana; 12 from Maryland; 7 from Mississippi; 3 from Missouri; 8 from New England; 18 from New Jersey; 12 from N. York;

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[1] Observations made during a visit to the Clarendon Springs, Vt., in relation to their character and properties, in a part of July and August, 1839. With an analysis of the waters. By Joseph A. Gallup, M. D. 8vo. pp. 14. Windsor, 1840.

63 from N. Carolina; 6 from Ohio; 44 from Pennsylvania; 56 from Philadelphia; 9 from S. Carolina; 29 from Tennessee; 111 from Virginia; 1 from West Indies, and 2 from England.

The number of graduates was 163.

Spirit of Turpentine in Iritis.[1]—Mr. Arnott strongly recommends the internal administration of the spirit of turpentine in iritis, after the more active inflammatory symptoms have been reduced by bleeding and tartar emetic. This remedy he has found to succeed in curing the disease when mercury and the strictest antiphlogistic regimen had failed. The spirit of turpentine was administered, as recommended by Mr. Hugh Carmichael, in emulsion, in the dose of a dram three times a day; and the only objection to the employment of the remedy was the difficulty or even impossibility of some stomachs retaining it beyond a certain length of time. This, however, might be obviated by diminishing each dose, but increasing their frequency.

BOOKS RECEIVED.

From Professor Mitchell.—Annual announcement of the Medical Department of Transylvania University, containing the Circular for the ensuing session; the catalogue of pupils, and the graduating class, for 1839–40, and the valedictory delivered to the graduates on the day of Commencement. 8vo. pp. 22. Lexington, Ky., 1840.

From the Author.—An Inquiry concerning the diseases and functions of the Brain, the Spinal Cord, and the Nerves. By Amariah Brigham, M. D. 12mo. pp. 327. New York, 1840.

From the Author.—Observations made during a visit to the Clarendon Springs, Vt., in relation to their character and properties, in a part of July and August, 1839, with an analysis of the waters. By Joseph A. Gallup, M. D. 8vo. pp. 14. Windsor, 1840.

From the Author.—An Address on American Literature, delivered before the Philomathean Society of Indiana University at its Annual Commencement, Sept. 25, 1839. By James Conquest Cross, M. D. 8vo. pp. 86. Bloomington, 1839.

From Professor Henry, of Princeton.—Introductory Lecture before the Albany Medical College, delivered Nov. 12, 1839. By Thomas Hun, M. D., Professor of Institutes of Medicine. 8vo. pp. 30. Albany, 1839. [For a Bibliographical notice of this, see the last volume, p. 314.]

From Professor J. B. Beck, of New York.—State of the New York Hospital, and Bloomingdale Asylum, for the year 1839. 8vo. pp. 20. New York, 1840.

From the Same.—Annual Report of the Interments in the city and county of New York, for the year 1839, with accompanying remarks. Presented by Wm. A. Walters, City Inspector. 8vo. New York, 1840.

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[1] Lond. Med. Gaz., 13th April, 1839, and Edinb. Med. and Surg. Journal, January, 1840, p. 247.

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ART. I.—EXTENSIVE CONTRACTION AND CONTORTION OF THE LOWER EXTREMITIES IN A GROWN PERSON, SUCCESSFULLY TREATED BY DIVISION OF THE CONTRACTED MUSCLES AND TENDONS.

BY ALBERT G. WALTER, M. D., OF PITTSBURG, PA.

The case narrated below is a very curious one, and certainly seldom met with. The success which attended the operation—the division of muscles and tendons—will be of great interest to the profession in general, and particularly to those who are cultivating the newly invented operation of Strohmeyer.

Orthopedia of the old school and its principles have undergone a material reform since Strohmeyer sent forth his experience, to which some of the advocates of this branch of surgery at first entered strong objections, unwilling either to investigate the matter in the proper spirit, or to give up a doctrine handed down to them from the oldest days of surgery with authorities sufficient to warrant its correctness. But a few years experience, based on true pathological and physiological principles, established Strohmeyer's doctrine beyond all doubt, and orthopedia of our forefathers is sinking to the grave of oblivion, over which a new and ingenious operation is expanding its branches, attended with a success not to be met with in the history of any other surgical operation.

A few years more, and this operation, the very ornament of modern surgery, will be fully tested and approved by the profession of every country, and even the advocates of orthopedia founded on mechanical means, will have to abandon a practice which has been seldom if ever successful in their hands, and to resort to the skilful use of the knife—the best and most approved orthopedial instrument.

There is not any human suffering, except the loss of sight or the destruction of parts of the face, more humiliating and distressing, which claims a greater share of sympathy for the unfortunate sufferer, and for which relief is oftener demanded from the profession, than that of deformities; and the benefit the community is now deriving from a simple and expedient operation is incalculable, and extending over the world.

Dieffenbach's experience is, I presume, the largest with respect to this new operation; for in a letter I received some months ago from him, he stated, that in the course of a few years he had cut more than three hundred tendons and muscles, and has restored persons as useful members to society, who had been considered lost to it for ever.

My experience in this branch of surgery, in whose investigation and cultivation I take a particular delight, convinces me that every deformity merely depending on muscular contraction is remediable; and I have no doubt that even *old cases of luxation of the humerus and some other joints* might admit of being reduced by the *division of the contracted muscles*, which while contracted are often the only cause that mechanical means are of no avail. I want to be understood, however, that I speak only hinting at the practicability of reducing luxations of long standing by the previous use of the knife. Experience does not yet enable me to give any decided opinion, but I believe it is worthy of being fairly tried, as it will not inflict any injury on the patient.

I intend to give a full history of this case, and hope I will be excused by the professional reader for its minute narration, inasmuch as the case is one of paramount interest.

Frederick Ferdinand Hoeke, glass cutter by trade, born August 19, 1811, of healthy parents, in Schluesselburg, on the river Weser, Prussia, passed his infancy without any sickness, except an affection of scabies, for which external remedies were used. But when arrived at the age when children generally try to make use of their limbs, he appeared to be too weak to use his, though apparently in the full enjoyment of health. Various external and internal remedies along with mineral baths and douche, were resorted to in succession for many years without any benefit, for he remained unable either to stand, walk, or sit, unsupported; while a marked contraction of the adductor muscles in inguine and of the flexores in poplite took place. At the age of six years, baths of the boiled intestines of the calf were administered with a better effect, for after a continued use of them the patient was able to sit without any support, and to walk along chairs; and when seven years old he could go on crutches, and even with a cane only, for a short distance. To prevent the increasing contraction in inguine, and the inclination of the thighs to cross each other, riding on horseback was used, but without any effect, for the thighs became permanently crossed, the knees and heels contracted, and sitting was the only comfortable position for him. Every attempt to separate the thighs and place them parallel caused violent pain in the lower part of the back and in the groins. Sudden jerkings of his lower extremities supervening on the least excitement, or even without excitement, and cramps contracting the knee joints, under which he laboured from infancy, became more conspicuous and frequent.

Walking with crutches was practicable in a slight degree till the 16th year of his age, although the close contact of the knees made it very tedious. From this time, however, Hoeke gradually lost the use of his extremities, and from the 20th year walking was out of the question; voluntary separation of the thighs could not be effected, and the knees and heels contracted more. The only way of moving about was by throwing forward both feet at a time while supported by crutches.

His general health has been undisturbed, though a furunculous disposition seems to be present, and every sore assumes a tedious character with regard to cicatrisation. All medical practitioners consulted in this case agreed upon some derangement of the nervous system being the cause of his deformity; yet it is not unlikely that the contraction of the muscles existed when he was born.

Present state.—About a year ago I accidentally met this patient moving about in a miserable and pitiable way supported by his crutches, and had to acknowledge that I never saw a more wretched deformity, without scarcely thinking at the instant, that relief might be procured by surgical means. Struck with the misfortune of the poor sufferer, I could not help, by repeated consideration, entertaining some hope of remedying his deformity, in case it should depend merely on muscular contraction, and the oftener my mind was engaged with this case, the more I became convinced of the practicability of an operation. In the latter part of last year I called on the patient to make an accurate examination of his case, and felt satisfied of the propriety of operating on him.

My patient is of healthy constitution, nervous temperament, rather slender make, with the expression of muscular weakness, of small size of body, with great disproportion between the trunk and lower extremities, the latter being much shorter in consequence of the contracted state of the muscles in the groins, knee, and foot joints. Hoeke measures, supported by his crutches, only four feet six inches. The columna spinalis is perfectly straight in the erect position without any deviation to either side, but its lower part forms a curvature outwardly while sitting, which disappears when standing. The pelvis and the bony portions of the lower and upper extremities are perfectly natural. The muscular system is weak and not much developed, presenting more the rounded form of the female than the fulness of the male. Having never been used to muscular exercise, he has contracted very lazy habits. There is an abnormal mobility of the joints of his fingers, which he is able to bend backwards, owing to relaxation of the ligaments of the joints. His intellectual faculties are undisturbed, the organs of sensation unimpaired, the susceptibility of the nervous system rather increased. There is no morbid affection in the thorax and abdomen except the disposition to piles, in consequence, as it appears, of want of exercise. The spinal marrow and its coverings (ligamentous as well as osseous) do not present any morbid condition, so far as a careful examination enables me to decide.

The muscles of the lower extremities are lax and without vigour, the glutei thin and rigid. Both thighs are of the same thickness. The left femur is kept constantly crossed over the right, and cannot be removed out of this position by the patient, either while standing or sitting, or by manual means. The sartorius, gracilis, and adductor longus muscle, with the fascia lata femoris, are very much contracted and rigid, which can be best observed by placing the finger on the inner side of each groin. Every attempt at removing the left femur from the right, bringing both on a level and separating them, causes great pain in the groin and lower part of the back, and produces involuntary jerkings and cramps of the extremities, while the thick cord-like contracted adductor longus muscle can be felt on both sides of the groin very resisting. In consequence of this muscular contraction (in which the pelvic muscles also appear to participate), the femora are kept permanently bent on the pelvis, and the thighs cannot be extended. The external abdominal muscles are likewise contracted, imparting to the finger the feeling of a board. The patient is able to move the left femur at the hip joint in a slight degree, but not the right, which after having remained for many years behind the other, does not allow of any motion at the hip joint, but is permanently flexed on the pelvis. The left femur can be extended by mechanical means, but not the right, the muscular contraction in the groin being the strongest. The patient never lies on his back, but on either side, with the knees drawn up.

The bones of the knee joint are perfect and natural, the muscular contraction is very strong. The joints are kept bent at a right angle. The muscles in the ham appear like cords on each side of the joint, the patella is raised and does not admit of the slightest motion. Both knee joints are inverted, the right one the most, representing the form which is occasionally met with in blacksmiths. The patient is not able to bend the knee joints, but does so with his hands, the left knee allowing of a greater degree of flexion than the right. When an attempt is made to extend the knee joints, there is great pain felt in the sartorius, gracilis, semitendinosus, semimembranosus, and in both capita of the biceps femoris, which appear like tense cords. In consequence of the unusual retraction of the patella, the natural form of the knee joint appears to be somewhat altered and flattened.

The muscles of the legs are wasted, the left more than the right, owing to the compression of the left arteria poplitea, in consequence of the crossed position of the femora, and nutrition being thereby impeded.

There is no deviation from the natural standard of sensibility and of temperature in the extremities.

The feet present a fair specimen of pes valgus of the older writers, which Scoutetten, in his admirable memoir on club-foot, calls very properly everted club-foot. The grastrocnemii muscles are shortened by contraction more than two inches, and the inner side of the sole only and the tips of the toes touch the ground. The musculi peronei are also contracted, in consequence of which the external side of the foot is raised and the foot itself everted. The soles of the feet are entirely level, without the natural hollow on the inside, and the internal ankles are more prominent than usual.

His way of progression, by throwing forwards both extremities at a time, while supported by crutches, is extremely tedious, tiresome and distressing.

My patient was subject to spasms and involuntary jerkings of his extremities from his childhood, which have rather increased in frequency, but not in intensity, for the last six years, and have obliged him to keep his feet very warm. If this was neglected, spasms afflicted him oftener and more violently. The jerkings of his limbs, from which the left suffers more than the right, make their appearance on the least noise or slightest excitement.

A careful examination of this interesting case proved that muscular contraction caused this pitiable deformity, and that an operation, although extensive, would restore the patient to the use of his limbs; and encouraged by the success which attended my operations on stiff and contracted knees, wry-neck, and every variety of deformed feet, I expressed to my patient an opinion with regard to the probability of success, and found him willing to undergo any treatment for the slightest hope of relief.

Without entering into a theoretical discussion, whether the deformity was congenital or acquired by disease, whether there was any organic or functional lesion of the nervous centres, their investments or of the peripherical nerves, to which could be attributed the subsequent contraction of the limbs; whether there was a chronic irritation of the muscles of the extremities which caused the pathological change, or a morbid innervation of the extensor and abductor muscles—the propriety of an operation could not be denied, inasmuch as muscular power, though impaired for want of exercise, and entire sensibility existed in the deformed limbs. There was no disproportion between the lower and upper part of his body, except that caused by the contraction of the limbs. It appeared to me that though he would not be able to walk without crutches after his limbs were straightened, yet in course of time and by frequent exercise, muscular power might develope itself more fully, and crutches could be gradually dispensed with. Even under the supposition, that he never would gain sufficient strength to walk without any support, feelings of humanity and commiseration induced me to operate on him for the restoration of his members, while on the other side an operation skilfully performed could not do him the least harm.

I felt convinced that the spastic movements of his extremities, having their origin in some morbid affection of the nervous system, would continue after the operation, but this should not be urged as a reason to give up an operation intended to remove such a distressing deformity. It might also be objected that the continuance of the spasms would again cause contraction. This, however, I deny, since they are slight and only accidental, and since the deformity has not increased during the last six years.

Without any preparation of the organismus for enduring the traumatic infliction (which I consider unnecessary in this kind of operations), I operated on him on September 19th, 1839, kindly assisted by Drs. J. P. Gazzam and G. D. Bruce, of this city. Being aware that a good many muscles and tendons had to be divided in a nervous and irritable constitution, and apprehending some traumatic reaction, I intended to operate first on one extremity, and after some time on the other. But after having severed all contracted muscles in the groin, ham, and at the heel on one side, my patient, endowed with great courage and resolution, wanted the other also to be operated on, which was done at the same time, with the loss of only a few drops of blood. The severing of the muscles did not inflict on him much pain, but the feeling of the tendons being cut through, and separating with a violent and audible crack, was disagreeable.

For the division of the adductors, I placed my patient in the horizontal position across the edge of a bed, and after the thighs had been forcibly abducted as far as possible by the assistant surgeons, I introduced a slightly concave narrow knife (such as I use for operating on club-feet, but longer and stronger,) one inch below Poupart's ligament, and one inch and a half from the inner side of the femur, the femoral artery and vein being on the outer side, parallel with, and along the external side of the adductor longus muscle, and feeling with my finger its point on the back part of the thigh, turned the edge of the knife towards the median line of the body, and severed by repeated sections the attachment of the adductor longus and gracilis muscle along with the fascia lata covering it, by carrying the point of the knife along the inner surface of the skin in order to ensure a complete section of the muscles This being done with a forcible and audible crack on the left femur, while the hollow between the cut surfaces could distinctly be felt for an inch, the femur could be easily separated and abducted. The same operation was performed on the right femur with the same result, the knees being separated for about nine inches. The incisions of the skin did not exceed in length the eighth part of an inch. Only a few drops of blood escaped from the orifices.

I then made the patient turn on his face, and after the knee-joint had been extended as far as possible, and the ham strings made tense, I grasped the biceps femoris muscle between two fingers of the left hand, and introduced the knife one inch above the poples on the external side of the knee-joint through the skin, and severed this muscle; at the same distance above the poples on the inner side of the knee-joint, I cut the tendons of the sartorius, gracilis, semimembranosus, and semitendinosus. A very audible crack followed the section of each of them, and the knee immediately allowed of complete extension. The same operation was done on the other knee. It is to be remarked that the gracilis muscle was cut at both points of its insertion, and that reunion nevertheless took place.

To remedy the deformity of the feet, both tendines achillis were cut across by entering the knife on one side of the leg. But so strong and rigid was this tendon, and so sudden and powerful the retraction after its section, that only the greatest care prevented the knife from passing through the skin behind the tendon. I consider it absolutely necessary, to restore perfectly the pes valgus, to divide the peronei muscles which cause while contracted the eversion of the foot and the tilting up of its outer side. Below the malleoli externi, both these muscles were severed in each foot, which I never found difficult to divide at this point, although Scoutetten, in his memoir on club-foot, objects to it, preferring their section above the malleolus.

The whole operation, comprising the division of *ten* muscles and tendons by *five* incisions of the skin on each extremity, did not occupy more than two minutes, and was done without bleeding or inflicting much pain on the patient. Amongst nearly sixty patients upon whom I have operated in this city, I have never before met with such a rigid condition of the tendons and such a powerful retraction of the muscles.

Graduated compresses with the usual bandaging were applied, and in case pain should supervene, cold applications were ordered. Extension was not made, the limbs being kept in the same position as before the operation.

At my night visit, I was not a little surprised to see my patient quite comfortable, sitting in bed, talking and enjoying the smoke of his pipe. There was not the least febrile excitement, and no pain in the cut muscles, or any uneasiness, except a slight degree of spasm in the lower extremities, particularly in the left. Indeed, I had expected some febrile reaction after the section of many muscles, though I never yet saw any thing like fever and active inflammation after the cutting of tendons, in all the cases I have operated on (comprehending patients from a few days old to 35 years of age.) To prevent the spastic movements of his extremities, acetate of morph. gr. ¼, was ordered at bed time, and cold applications continued to the incisions.

The next day he felt quite well, had enjoyed a good night's rest, without any fever, but with spastic movements of the extremities, causing pain in the cut muscles. Morph. acetat. gr. ¼, three times a day was continued, as also the antiphlogistic regimen; cold applications discontinued.

Forty-eight hours after the operation, the spastic contractions had subsided, the small incisions were healed, there was not any swelling about them, nor any inflammation. I commenced to-day extending the contracted extremities in an apparatus similar to that of Strohmeyer. To the leg-piece I had attached a thigh board with a joint, on each side of which an apparatus was fixed for the purpose of bringing both pieces (the leg and thigh boards) gradually straight. Each extremity being placed in a machine and secured by straps and bandages, a kind of machinery was affixed to each thigh-board, for the purpose of separating the thighs gradually, which could now be kept seven inches apart, between the knees, without any pain. I kept my patient on a mattress on his back, with his shoulders slightly elevated.

On the third day after the operation, a very annoying diarrhœa supervened, consisting of a mucous discharge from the lower part of the bowels with tenesmus. The spastic contractions of the limbs reappeared in a slight degree, particularly in the left. I went on extending the knees, heels, and separating the femora. There was greater tightness in the left groin, but not any pain in the back, of which he had complained before the operation on every attempt to separate his limbs.

Every day I extended the limbs more, my patient rested pretty well, though he did not like the recumbent position, and the spasmodic contractions continued in a slight degree. But the mucous diarrhœa mixed with blood caused by the appearance of hæmorrhoidal tumours, external as well as internal, continued troublesome, and did not yield readily to medication.

After seven days extension, the knees were separated a foot, and the distance between both heels, two feet. The knee-joints were nearly straight, and the heels on a level with the toes, and the outer side of the foot with the inner. After each extension the patient felt a degree of tightness and uneasiness in the stretched muscles for about an hour or an hour and a half, but this wore off and left him comfortable with the exception of spasms. But tired of the recumbent position, and wetted by the frequent discharge from the bowels, and being badly attended by his friends, he insisted on the removal of the apparatus. We, however, remonstrated against it, and continued the extension for some days longer, when we had the satisfaction of seeing his knees separated sixteen inches, his knee-joints perfectly straight without any inclination of the knees inwards, and the heels on a level with the toes. We would have kept on the extending apparatus some time longer, but were obliged to remove them at the expiration of two weeks after the operation, from the appearance of a sore on the os sacrum, and of commencing soreness of the skin of his feet and knees, although we had taken every care and precaution to avoid it. With the appearance of sores he suffered much from spasms and jerkings, and his rest was disturbed. But all went on favourably as soon as the bandages were removed.

To prevent contraction of the extended muscles, we used splints and bandages, and placed some cushions between his knees.

It ought to be mentioned that Hoeke was, during health, subject to spasms, and that they were aggravated during the time of extension, by the occurrence of sores. So great indeed was the excitability of his nervous system, that the least touch with a finger on his limbs excited the spasms, which were more severe towards evening than during night or in the morning.

The mucous and bloody diarrhœa with the hemorrhoidal tumours disappeared at the end of three weeks, when he commenced to sit up in bed and on a chair. The soreness of his feet did not yet allow him to use them, although he could stand supported by crutches, and use his limbs as if walking. The spasms gradually decreased, although the habitual jerkings remained.

There did not appear any disposition in the severed muscles to contract again, his extremities being perfectly straight in every respect, and his stature increased *six* inches. For nearly ten weeks we had to attend to the sores, and three months after the operation was performed he used his extremities more, felt them growing stronger every day, and is now walking about on his crutches, although yet weak. He has the complete use of his legs, can bend and extend them, performs abduction and adduction of the femora with the greatest ease, and there is not the least inclination of the left knee to cross the right. He can stand straight without any support, can now walk with one crutch, but prefers to use both from the fear of falling. It is rather remarkable, that the jerkings and cramps in his limbs have decreased very much, as well in intensity as in frequency.

My very esteemed friends Drs. J. P. Gazzam and G. D. Bruce saw my patient while walking sometime ago, and were struck with the success of the operation.

I might appear to be too sanguine in expressing the hope that my patient may, in the course of years, so far recover as to be able to walk without any support, which he never did since he was born; but from the history of his case I am inclined to believe that locomotion was out of the question as long as the contraction of the muscles existed, which was observable in the first years of his life, and that the want of exercise in consequence of the contracted muscles produced the weakness of his limbs; though I do not feel disposed to deny that some derangement of the nervous system, although unknown to us, either originating in the medulla spinalis and propagated from thence to the peripherical nerves, or in the peripherical nerves, and reflected to the nervous centres, may be a link in the chain of morbid phenomena causing innervation of the muscles. I leave the latter supposition, which is difficult of resolution, and proves that much yet remains unknown as to the etiology of deformities, to the theoretical speculator, and content myself with remarking, that if this man was in better circumstances, allowing of the administration of every means calculated to increase bodily strength, I have not the least doubt, that for the pains and trouble I took with him, I should be amply rewarded by the satisfaction of seeing him walking with comfort and ease, and without any support.

Should, however, this fortunate result not take place, and his strength never increase to the degree necessary to support his body, I believe I have been of much service to him—in having remedied a very distressing and pitiable deformity, and restored to him the use of his limbs—as well as, I hope, to the profession, by communicating the successful result of a new and interesting operation, which has never been equalled in the number of tendons and muscles divided.

For the American Medical Intelligencer.

ART. II.—CASE OF HEMIPLEGIA PRESUMED TO BE DEPENDENT UPON GASTRIC DERANGEMENT.

BY THOS. H. COLLIER, M. D.

New Church, Accomack county, Va., April 9, 1840.

A lady, æt. 20, was attacked with common bilious fever, pain in the back and extremities; slight chill at the commencement of the disease; continued fever of synochal grade; tongue broad, moist, with thick yellowish fur, and without redness either of tip, edges, or papillæ; nausea, without vomiting; anorexia; bilious stools of ordinary quantity and frequency; very little tenderness upon pressing any part of the abdomen; yellowish tinge of the skin and conjunctiva; but combined with this state was a very unusual symptom; so much so, that it is the only case in which I have ever seen it without any more serious cause to account for it than could here be detected. This was complete hemiplegia, affecting the right side. I was, of course, led to a closer scrutiny of the various organs, whose derangements could give rise to such a symptom, before prescribing. The closest examination could detect no primary disease of the encephalon or spinal marrow, of the thoracic vicera, kidney, or any other organ, except those concerned in digestion. The slight degree of nausea; the abdominal tenderness; the absence of thirst and vomiting; the state of the tongue, and the absence of those nervous symptoms so characteristic of ileitis, though these, taken separately, would not justify the diagnosis, yet, taken together, forbade the idea of gastritis or enteritis; and the absence of the rational and physical symptoms of hepatitis, except slight jaundice and bilious stools, led me to look upon it as merely a case of common continued fever, which recognised for its cause, at least its only appreciable pathological complication, that state of the digestive apparatus to which Andral (Cours de Pathologie, etc.) has given the name of secretory irritation; and to consider that the hemiplegia depended upon the sympathetic influence of the stomach upon the encephalon or spinal marrow; I accordingly prescribed an emeto-cathartic of calomel and ipecacuanha, followed by mild aperients, and the usual remedies used in bilious fever; no injurious effects resulted from the prescription, but, on the contrary, the fever began to decline, and with the improvement in the other symptoms, the paralysis subsided. The patient was perfectly restored in a few days.

Am I correct in the opinion that the stomach can exert such a sympathy as this, when itself is affected in this very mild degree, without any symptom which can be referred to inflammation of this organ; and in a person not at all unusually impressible, as was this young lady, notwithstanding her sex? This case teaches us how cautious writers should be in drawing conclusions for universal application, from particular symptoms, as to the condition of the organ through which they are immediately manifested, or of those which may affect it sympathetically. Leaving out of question the ultra views of Brousais and his followers, how many, from reading Stokes's lectures, Louis's works, Andral's Clinique (amongst the most cautious works on diagnosis) would have referred this symptom to gastritis or encephalitis! But the result of treatment, I conceive, justifies my views; and had I adopted a diffeient plan, my patient would probably have been confined to her bed two or three weeks.

BIBLIOGRAPHICAL NOTICES.

Brigham on the diseases and functions of the Nervous System.[1]

Dr. Brigham, in the work before us, discusses the structure and functions of the brain, and various opinions that have been entertained thereon, so that the first part of his work is mainly anatomical and physiological. The second part is devoted to the diseases of the brain and of other parts of the nervous system, on which the author was compelled to be brief. Yet he is comprehensive, and, we are glad to find, has not permitted his views on certain functions of the brain to render him wholly exclusive in his opinions. Still he is disposed to admit much to be proven, which we should consider to be hypothetical.

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[1] An Inquiry concerning the Diseases and Functions of the Brain, the Spinal Cord and the Nerves. *By* Amariah Brigham, M. D. 12mo. pp. 327. New York, 1840.

Among the diseases of the nervous system we find hypochondriasis and dyspepsia; the former placed there with much propriety, the latter on very questionable grounds. We have had much to do with severe students, and have closely investigated their habits, and have quite satisfied ourselves, that disordered digestion rarely, if ever, arises from the employment of the brain in its own acts. As these acts, however, are so often attended with the collateral morbific agencies—of irregularity in sleeping and eating, want of due and regular exercise, &c., it is not surprising that dyspepsia should be ascribed to them. In a review of the fanciful Madden's Infirmities of Genius, in the American Quarterly Review, published some years ago, we developed our views on this subject, and endeavoured to show that, except in particular cases, the tendency of study is to render the individual longevous (*American Quarterly Review*, xxix, 214, and the Editor's *Elements of Hygiene*, p. 461); and since that period we have seen no reason to modify the opinions then expressed.

MISCELLANEOUS NOTICES.

New York Hospital and Bloomingdale Asylum.—Two thousand and forty-one patients have received medical and surgical treatment in the former extensive institution in the year 1839.

In the Bloomingdale Asylum, 113 were admitted.

Albany Medical College.—At a meeting of the trustees of this institution held on the 1st day of April, the department of Materia Medica and Pharmacy was changed to Materia Medica and Natural History, and the department of Chemistry and Natural History was changed to Chemistry and Pharmacy.

Professor D. M. McLachlan was elected Professor of Obstetrics and Diseases of Women and Children, in place of Professor Bedford, resigned.

Professor E. Emmons was elected Professor of Materia Medica and Natural History, in place of Professor McLachlan.

And Lewis C. Beck, M. D., of Rutger's College, was elected Professor of Chemistry and Pharmacy, in place of Professor E. Emmons.

The Faculty is now composed of the following gentlemen, viz:—

Alden March, M. D., President and Professor of Surgery.
James McNaughton, M. D., Professor of the Theory and Practice of Medicine.
Ebenezer Emmons, M. D., Professor of Materia Medica and Natural History.
James H. Armsby, M. D., Registrar and Professor of Anatomy.
Lewis C. Beck, M. D., Professor of Chemistry and Pharmacy.
David M. McLachlan, M. D., Professor of Obstetrics and Diseases of Women and Children.
Thomas Hun, M. D., Professor of the Institutes of Medicine.
Amos Dean, Esq., Professor of Medical Jurisprudence.

Report of the Obstetric Department of the Philadelphia Dispensary, for the 1st, 2nd. and 3rd months, 1840.—*Joseph Warrington, M. D., Accoucheur.*—Forty women have been delivered of forty-three children, at or near the full term of gestation, three women having twins.

Twenty-four of the children were boys, nineteen were girls—in two of the twin cases the children were boys, in the other case they were girls.

The average duration of labour in ten cases, was 13 hours 24 minutes—the extremes being 2 and 33 hours.

The average time occupied in the spontaneous delivery of the placenta in sixteen cases, was 19 minutes—the extremes being 5 and 75 minutes.

In two cases the placenta was withdrawn from the os uteri and vagina after it had occupied that situation, in one case 120 and in the other 240 minutes—being in these cases retained merely for want of expulsive effort.

In another case the edge of the placenta and a portion of the membranes adhered to the uterus, requiring prompt and efficient aid in their separation and removal.

In one case the placenta was extensively studded with calcareous deposites without being accompanied with any feebleness or indisposition of the child.

Of thirty-seven cases of cephalic presentation, fourteen were of the first, one of the second, two of the third, one of the fourth, and one of the fifth position of the vertex—no other variety was noted.

The case which presented the occiput in the fifth position was converted into the first, by acting upon the right temple with the finger.

The forceps were applied at the superior strait in one of the cases of third position, and the patient safely delivered after a tedious and exhausting labour.

In the other case of third position the delivery was facilitated by converting it into a first position.

In the case of adhesion of the edge of the placenta and a portion of the membranes, the hemorrhage after delivery became alarmingly profuse. Ergot suspended in brandy was administered, and as soon as the adhesions were broken up, the complete contraction of the uterus was aided by frictions, followed by a graduated compress upon the hypogastric region, and a tight bandage around the lower part of the abdomen.

In one case severe and extensive peritonitis came on the third day after delivery—this was treated by copious and repeated bleedings, general and local, calomel, Dover's powder, castor oil, and towards the conclusion, free vesication over the abdomen.

One patient suffered from severe uterine engorgement with exalted sensibility, which was speedily relieved by free venesection and saline cathartics.

All the women recovered.

Of the children, one had hare lip, which was successfully operated upon at five weeks old, by Dr. Mütter.

One male child suffered from sabulous deposites in its urethra and difficulty in urinating.

One female child had retention of urine. Both these cases required the use of the catheter for several days after birth; they recovered, and all the other children have done well, with the exception of one, which died in convulsions on the fourth day after its birth.

Nine pupils have participated in the "Practical Instructions," and attendance upon cases conducted by the Accoucheur, during the period embraced in the above report.

Mortality of New York, 1839.[1]—The whole number of interments within the city during the year ending Dec. 31st, 1839, were 7953; being 100 less than for the year preceding.

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[1] From Dr. Walters's Report of Interments.

Of these, 7491 were from among the white population, and 462 were coloured persons.

Of the whole number 4389 were males, and 3564 females. This excess of mortality among the male population, as already stated in the reports of interments for previous years, is not easily explained, and is probably much greater than the proportion of male over female residents.

The disparity commences during fœtal existence, as is shown in the table of still-born infants, and continues almost through every period of life.

The average mortality among the foreign population appears to be much greater than among the native citizens. Of the whole number of deaths in persons over ten years of age, 1419 were natives and 1853 were Europeans.

The season of the year most fatal to human life in this city, as shown by the tables, is during the months of July, August, and September. The season, on the contrary, in which the fewest deaths occur, is during the three months immediately preceding these, namely, April, May, and June.

The great mortality in this city among children under five years of age, has long been the subject of remark. During the past year, excluding the still-born, more than half the deaths, or 3696, occurred in children before the completion of their fifth year. The diseases most fatal within this period of existence are, marasmus, inflammation of the brain, hooping cough, measles, scarlet fever, dysentery, diarrhœa, cholera infantum, croup, convulsions, dropsy of the brain, and teething.

The mortality from pulmonary diseases, including in this list all the disorders of the respiratory organs, is nearly equal to one-third of the whole number of interments.

The deaths from pulmonary consumption alone, during the past year, were 1,315, being an increase of 90 over the year preceding.

The mortality from pulmonary consumption in this city, may be rated at one-sixth of all the deaths; but the average varies greatly among the different classes. It is worthy of remark, that of those over ten years of age, that die of this disease, more than one-half are natives of Europe. Of the 5564 deaths among the native white citizens, only 610, or about one in nine, occurred from consumption. Of the 462 deaths among the coloured population, 132, or one in three and a half, occurred from this disease. And of the 1853 deaths among the European population, 563, or about one in three and a quarter, occurred from the same disease.

The city has been visited by no fatal epidemic during the past year; and, with the exception of measles, the various contagious diseases have been less prevalent than formerly.

The tables show 68 deaths from small pox. The proportion of these that had previously undergone vaccination cannot be ascertained; but as 38 of them, or more than one-half, were among children under five years of age, the probability is, that very few of the whole number had resorted to the only efficient means of protection against this loathsome and fatal malady.

Dr. Parrish.—[For the following obituary notice, we are indebted to one who was intimately acquainted with the actions and motives of the estimable physician, who has been recently lost to this community and to the profession.—Ed.]

Dr. Joseph Parrish was born in Philadelphia in the year 1779, of respectable and pious parents, who were members of the religious Society of Friends. His father was a hatter, and he, being the youngest of eleven children, was kept under the paternal roof, and instructed in the lighter parts of this business.

He was strongly inclined from boyhood to the study of medicine, but circumstances prevented him from attaining his wishes, until he had passed his 22d year. About this period he entered the office of Dr. Wistar, at that time Professor of Anatomy in the University of Pennsylvania. He soon exhibited strong proofs of talent, and remarkable assiduity in the pursuit of medical knowledge, which, joined to a disposition unusually amiable, strongly endeared him to his preceptor, and to his associates. He graduated in the University of Pennsylvania in the spring of 1805. The occurrence of yellow fever in Philadelphia in the autumn of this year, gave him an early opportunity of becoming extensively known.

He was elected resident physician of the city hospital at Bush Hill, and soon distinguished himself for his skill, and attention to the patients who sought a refuge in that establishment. Soon after completing his duties here, he was elected physician to the Dispensary, and obtained a share of private practice. He rose rapidly in public esteem, and was elected surgeon to the Alms House Hospital about the year 1809.

He soon became prominent for his abilities as a surgeon, was prompt and skilful as an operator, possessed remarkable acumen in diagnosis, and was conspicuous for the precision and forethought which marked his conclusions. He also became popular as a clinical lecturer, his remarks at the bed side being eminently practical, and his manner and style of delivery exceedingly pleasing. He held this situation for about 15 years, during which time his reputation continued to advance, and he became extensively known as a surgical teacher to the numerous medical students who visited Philadelphia to pursue their studies.

In the year 1816, he was elected Surgeon to the Pennsylvania Hospital in the place of Dr. Physick, who resigned on account of ill health. By his close attention to the duties, and his high character as a surgeon, he contributed largely toward maintaining the exalted reputation which this institution had acquired as a surgical school. He held this situation until the spring of 1829, when he resigned in consequence of ill health, and an indisposition to engage in extensive surgical operations. His active benevolence toward the inmates of hospitals, and his constant watchfulness over their comforts, was the theme of admiration from all those who had any knowledge of Dr. Parrish as an hospital surgeon.

During the period of his connection with public institutions, and for some years afterward, he always had a class of private pupils, who received instruction from him at his office or lecture room, and who obtained many important practical advantages, which his extensive opportunities enabled him to afford. His class was usually composed of from 15 to 25 young men from the city and different parts of the country.

He gave a regular course of lectures on the practice of medicine during the summer term, and on surgery during the winter. His lectures consisted of general remarks on particular diseases illustrated by the narration of cases, which had occurred in his own practice. He taught only what he knew from actual observation—referring his students to medical works and to the lectures at the schools, for more extended and elaborate descriptions. He was very careful to preserve a record of interesting cases, which fell under his notice, and his lectures abounded in valuable information derived from this source.

His pupils contracted for him the warmest esteem and affection, and amongst them are some of the most distinguished members of the profession.

He published essays on a variety of subjects, which are to be found chiefly in the Eclectic Repertory, of which he was one of the editors, and in the North American Medical and Surgical Journal.

His remarks on pulmonary consumption, which appeared in several numbers of the latter periodical, have attracted general attention, and have obtained additional interest from the fact, that a post mortem examination of his own body, proved that he himself was the subject of this malady in early life, and that he was cured by the practice, which he had so warmly advocated, in opposition to the almost united medical opinion of the day. He published the American edition of Lawrence on Hernia, with an appendix—

and, within a few years of his decease, a work on Hernia, and some of the diseases of the urinary organs, which contains a large number of observations, derived from his own practice.

His views of the medical profession were of the most exalted character—he believed it the most dignified pursuit, which could engage the attention of man, and he despised any attempt to render it subservient to selfish or sordid ends.

His standard of medical ethics was truly elevated, and his sense of honour and propriety in his intercourse with his medical brethren was delicate and refined. In a most extensive private practice for a period of thirty-five years, during part of which time he was in the occupancy of important public stations, he perhaps had not—certainly he ought not to have had—an enemy in the medical profession.

His fostering attentions to the junior members of the profession secured for him their warmest regard, and his numerous acts of disinterested kindness towards many of them will never be forgotten.

Dr. Parrish enjoyed to a remarkable degree the confidence of the community, and, until within a short period of his death, was laboriously engaged in professional duties. His medical correspondence was very extensive, and his opinions highly valued over the whole country.

As a philanthropist and Christian he held a conspicuous rank, and contributed largely of his time and his means, in advancing those objects which were calculated to relieve the sufferings of his fellow beings. He died in his 61st year, on the 18th of March, 1840, universally beloved and regretted.

On the treatment of acute rheumatism by opium.—By. D. J. Corrigan, M. D.[1]—[We have used the opium practice in acute rheumatism, as well as the various narcotics and acro-narcotics. When pushed so as to affect the system, we have found them all to be occasionally beneficial. The opium practice has, we think, been as serviceable as any, and its use is entirely philosophical.—Ed.]

Eight cases of acute rheumatism cured by opium alone are given in detail by Dr. Corrigan, and as the practice appears to be novel, whilst it recommends itself from its simplicity and general applicability, a short notice of these cases may be read with interest. When he first commenced the opium treatment he was afraid to trust to it alone, and therefore combined it with calomel; but finding that no good resulted from this combination, he dropped the calomel, and continued the opium alone.

Three of the cases are selected to illustrate the mode in which the remedy was administered.

Mr. R., aged 30, was seen on the 19th January, 1838. For several days he suffered from flying pains, but for the last three days he has been under the most acute suffering from pain in the shoulders, in the back of the neck, along the loins, in the knee, wrist, and ankle-joints. The knees, ankles, and wrists were swollen, and exquisitely painful. He had slept none for three nights; the pulse was 132; the bowels free; the tongue covered with a thick white coat; the urine very high-coloured, and depositing a pink sediment; and the skin partially perspiring. One grain of opium with two of calomel were given every third hour, and opiate fomentations were applied to the joints. On the next day the pains were less, and the pulse had fallen to 120; but he had not slept. The opium was therefore increased to a grain and a half every third hour.

On the 21st he had slept some, and the pulse had fallen to 104. The pains were greatly diminished, and the swellings of the joints somewhat lessened.

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[1] Dublin Journal of Medical Science, November, 1839, and Edinb. Med. and Surg. Journal, January, 1840, p. 243.

The opium was continued in the same dose. Next day he was found to have slept well, and the pulse had fallen to 92. The opium without the calomel was continued for three days longer in the dose of a grain and a half every third hour, at the end of which period, being quite free from pain, and with a quiet pulse, he was put on bark.

Dr. Corrigan attended his friend Dr. Aldridge, who had a very severe rheumatic attack of three days' duration when he was first seen by Dr. Corrigan. Nearly all the large joints were swollen and acutely painful, and the pains were shifting from joint to joint. The pulse was 120; the tongue very foul, but moist; and the want of rest from the agony of the pain was most distressing. He was immediately put on the opiate treatment. He first got one grain every two hours; the quantity was then increased to one grain every hour; and this was continued for thirteen days, with the administration of an occasional purgative. On the fourteenth day he began to take the *Mist. guaiaci c. sulph. quinæ;* and on the fifteenth day he was walking about his parlour, complaining only of not being so strong as usual, but free from pain and swelling. Dr. Aldridge calculated he had taken about two hundred grains of opium during the treatment.

Mr. H. aged 26, had suffered for three days under a very acute attack of rheumatism. The shoulders, wrists, and knees were swollen, and very painful; and the pains had been so severe that for three nights he had not closed an eye. His pulse was 120 and full; and his tongue moist. He was put on the opium treatment, and took every day for six days from eight to ten grains of opium. On the seventh day, he began to take along with the opium the *Mist. guaiaci c. sulph. quinæ*, and on the eighth day of attendance, he only complained of some stiffness in the affected joints. His pulse had fallen to 76, and his appetite was good.

In one of his cases pericarditis was threatened, the pulse became affected, oppression and constriction across the chest were felt, the countenance became anxious, and the patient was bathed in profuse perspiration. These unpleasant symptoms subsided under the steady use of the opium combined with a grain and a half of quinine to each dose.

Dr. Corrigan remarks, that "the most important rule to be remembered in employing opium for the cure of acute rheumatism is, that full and sufficient doses shall be exhibited;" unless carried to this length it is sure to end in disappointment. He mentions it as a singular circumstance, that sometimes during the progress of the cure under the opium, diarrhœa should come on so as to require the exhibition of chalk and kino. He recommends the local application of flannel soaked in warm spirit of turpentine, or in camphorated spirit, or in simple decoction of poppy heads, to the inflamed surfaces. If the patient should suffer much from constant profuse perspirations, he recommends the conjunction of sulphate of quinine with the opium.

Dr. Corrigan thinks this plan of treatment superior to all others, because it shortens the duration of the attack, alleviates the sufferings of the patient, husbands the strength, and prevents the complications of endocarditis, pericarditis, &c., which so often complicate this disease, and are the cause of prolonged suffering ending only in death.

At the end of his abstract of Dr. Corrigan's paper, the editor of the Edinburgh Journal has the following note.

Several years ago we had an opportunity of testing the efficacy of this practice, and found it superior to every other. Large doses of opium were at first given, not with the view of curing the disease but of alleviating the intense suffering under which the patient laboured. Since then we have employed it in several cases, and always with the most marked benefit; the disease seldom lasting beyond a fortnight, and being much alleviated during the whole course of the treatment.

Experimental researches on the functions of the brain. By M. Nonat.[1] —[The following are additional speculations on the yet unknown functions of various parts of the brain.—Ed.]

According to M. Nonat the lobes of the brain, the *corpus callosum*, the fornix, the *corpora striata*, the optic layers, the cerebellum, and the crura of the cerebrum, are not possessed of general sensibility, as evidenced by touch. In the lobe of the fourth ventricle, as was shown by MM. Magendie and Desmoulins, resides the faculty of the perception of general sensibility. Physiologists are wrong in placing the seat of sensibility in the cerebellum, as an animal from which the whole of the cerebellum has been removed retains the faculty of seeing, hearing, tasting, feeling, and smelling.

With regard to the influence of the cerebellum over the movements of progression or of standing, M. Nonat has arrived at the following results:

1. The lobes of the cerebrum direct the movements. Thus, when we wish to go from one place to another, it is by the action of the cerebral lobes that we are enabled to execute the movements necessary for this purpose. A rabbit deprived of the lobes of the brain executes the same movements as before; it is only weakened; but it can no longer avoid any obstacle, it cannot find its food; in short, it is deprived of that principle which formerly gave to all its movements a determinate direction.
2. The *corpora striata* regulate the movements backwards.
3. The *thalami optici* exercise a considerable influence on the actions necessary for standing; they furnish in a great measure the principle which supports the energy of muscular contraction.
4. The cerebellum directs the regularity of the forward movements; it appears to direct the movements of the lower extremities; and probably has also some influence on the equilibrium of the movements.
5. The circle formed by the cerebellum, its crura, and the transverse fibres of the cerebral protuberance regulates the movements of rotation around the axis of the animal.
6. The *tubercula quadrigemina* are necessary to the regular exercise of motion. Their lesion disturbs the harmony of the actions required for progression or for standing. This result agrees with that of M. Serres.
7. The lobe of the fourth ventricle contains a principle which overrules and regulates the respiratory movements, vomiting and crying. In this part of the encephalon resides a principle, in virtue of which an animal has the consciousness of tactile, and also of sonorous impressions.

On the causes of sudden death. By Alphonse Devergie.[2]—It is the common opinion that apoplexy is the most frequent cause of sudden death. M. A. Devergie has endeavoured to ascertain how far this opinion is founded in truth, and has found that sudden death from affection of the brain is rare. Of forty cases which he has examined he has met with four only in which death resulted from an affection of the brain; three in which there was congestion of the brain and spinal marrow; and twelve in which the brain and lungs were simultaneously affected. Sudden death from an affection of the lungs alone is the most common. M. Devergie met with twelve cases of this out of forty; and if to these we add the twelve examples of sudden death in which the lungs and brain were both affected, we shall have twenty-four out of forty in which the lungs were affected in cases of sudden death. Death from affection of the heart was the most rare. M. Devergie met with it only three times.

It results from these researches that, if arranged according to the order of their frequency, sudden deaths are occasioned, 1. from an affection of the lungs; 2. of the lungs and brain; 3. of the brain and spinal marrow; 4. from hemorrhage; 5. from an affection of the heart. It is consequently an error to regard apoplexy, that is circumscribed cerebral hemorrhage, as the most common cause of sudden death, since of forty cases M. Devergie observed an apoplectic effusion of blood only once. Sanguineous congestions of the meninges should not be ranked among cerebral hemorrhages. M. Devergie further ascertained that sudden deaths were more frequent during winter, and more common in men than women. Among the forty deaths noted only five were of women. He also observed that sudden deaths occur chiefly among persons from forty to fifty, and sixty to seventy years of age.

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[1] Gazette Médicale de Paris, 19th October, 1839, and Edinb. Medical and Surgical Journal, January, 1840, p. 239.

[2] Annales d'Hygiène Publique, July, 1838, and Edinb. Med. and Surg. Journal, January, 1840, p. 242.

NECROLOGY.

MM. Biett, and H. Cloquet.—Our recent Journals'[1] announce the deaths of M. Biett, one of the physicians of the Hospital St. Louis, well known for his valuable researches on cutaneous diseases; and of M. Hippolyte Cloquet, the author of many contributions to medical science, of which his *Faune des Médecins*, in four volumes, is the most elaborate.

BOOKS RECEIVED.

From Sir James Clark.—Statement of the case of the late Lady Flora Hastings. 8vo. pp. 15.

From Professor Horner.—Catalogue of the Trustees, Officers and Students of the University of Pennsylvania. 8vo. pp. 35. Philadelphia, 1840.

From the same.—Catalogue of the Medical Graduates of the University of Pennsylvania, April 3, 1840.

From the Committee of Publication.—Valedictory Address to the Graduates of the Medical Department of Pennsylvania College. By William Rush, M. D., Professor of the Theory and Practice of Medicine in the Medical Department of Pennsylvania College. 8vo. pp. 16. Philad., 1840.

From Dr. Joseph S. Nancrede.—Notice sur le Monésia, par M. Bernard Derosne, Pharmacien à Paris. 8vo. pp. 16. Paris, 1839.

From the same.—Tableau synoptique presentant l'essai analytique l'indication de quelques préparations pharmaceutiques et les propriétés médicinales d'une substance végetale nouvellement importu de l'Amérique du Sud, et counue sous le nom de Monésia, par Martin-Saint-Ange.

[We have already given a long account of this new remedy, by M. Martin-Saint-Ange, in the pages of this Journal. Intelligencer, March 1, 1840, p. 363.]

From Professor Frost.—Catalogue of the Officers and Students of the Medical College of the state of South Carolina, 1839-40.

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[1] London Lancet, March 14, 1840, p. 396.

THE

AMERICAN MEDICAL INTELLIGENCER.

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For the American Medical Intelligencer.

ART. I.—CASE OF FISTULA IN ANO, WITH OBSERVATIONS.

Columbia, South Carolina, April 6, 1840.

Cornelius Morgan, æt. 26, a hatter, of an unhealthy aspect, was admitted into hospital, labouring under the above complaint, of which the following is an accurate history, at the time of his admission.

There are three fistulous openings close to the verge of the anus on the left side, two of which are very small, and will scarcely admit the point of a probe: the third and most external one is much larger, its edges are smooth and indurated, and the integuments around it are for some extent red, thickened, and detached from the subjacent parts. Upon introducing a probe into the most internal of these fistulous openings, a canal can be traced extending upwards towards the rectum about an inch and a half, but it does not communicate with the intestine. Neither of the other two extends so high up, nor do they communicate with the first mentioned fistulous opening, nor with the canal of the rectum. He suffers no pain, but great inconvenience from the discharge of matter, and experiences considerable uneasiness when walking, or whilst sitting on the part. His breathing is short, and he is troubled with palpitations of his heart, particularly after the slightest exertion. He labours under a distressing cough, which is attended with copious expectoration. The pulse is 112, and varies upon the slightest change of posture. He has nocturnal perspirations, which are principally confined to his head and chest. His appetite is tolerably good; he has no thirst, and his bowels are generally regular.

He states that his complaint commenced about fifteen weeks previous to his admission into the hospital; at which time he first observed two small swellings in the vicinity of the anus, which at times gave him a good deal of pain, especially when he coughed, sneezed, or went to stool, and in sitting he was compelled to rest upon the right buttock, that is, the opposite one. At the expiration of a month, the skin covering these swellings having become red, and the pain acute, he was obliged to apply to a surgeon, who, to relieve him, made an incision into each swelling, when a quantity of fetid matter issued from them, which afforded him instantaneous relief from pain. They have continued to discharge matter of an offensive nature ever since, but *he has never observed air* or *fæces* to escape through the openings.

He has been labouring under a cough for twelve months, and he thinks it has been materially relieved, since the swellings were opened. By the assistance of the stethoscope it has been ascertained that tubercles exist in the superior lobes of each lung. He can ascribe no cause for his complaint. According to his own account, he has always lived in a moderate and regular manner, although he acknowledges having undergone a mercurial course about five years previously for a venereal complaint.

Upon consultation he was deemed a subject unfit for operation, and he was accordingly discharged from the hospital.

Observations.

In cases like the present, it is always a most desirable object to ascertain, as far as possible, the habits of the patient; for a surgeon, who lives in a large city, and who is accustomed to see more of the various trades labouring under disease, will upon reflection and from experience, find that different trades are subject to different diseases: that the members of one class are more dissipated than those of another: that diseases in them are modified by their previous habits, and that it not unfrequently happens they are unfit subjects for undergoing surgical operations. The man, whose case has been just related, belongs to the trade of hatters, who, it is found, are a very dissipated class of the community, and are consequently ill adapted to bear an operation well.

From the history of this case it is discovered, that distinct abscesses formed in the vicinity of the anus; and, although in this instance, the fistulæ do not communicate with the gut, yet in the generality of cases, where more than one exists, the sinuses do communicate with the intestine; and it is also observed that a succession of abscesses is produced, whilst one is being converted into a fistula. The pulse in this case is accelerated upon the slightest exertion, and by means of the stethoscope, the existence of tubercles in the lungs has been ascertained; so that, taking these circumstances into consideration, it must be inferred that he is not a fit subject to undergo an operation. To those who were only partially acquainted with the true nature of this complaint, it might perhaps appear, that every case of fistula in ano might be operated on; but experience proves the contrary, so that an accurate discrimination, as will be presently seen, is absolutely requisite.

A fistula always pre-supposes an abscess or wound: an abscess, when it forms near to the anus or in the perineum, either bursts spontaneously, or, to relieve the patient, is opened by the surgeon; after which it degenerates into a fistula, having hard and callous edges, and is not disposed to heal, on account of the thin matter, which is constantly escaping, and of the nature of the parts, which in this region are loaded with an immense quantity of fat, and are not, as in other parts of the body, capable of taking on the adhesive inflammation. Although this is the mode in which an abscess degenerates into a fistula, yet a fistula in ano is very often the result of a wound.

Fistula in ano, in relation to the internal orifice of the fistulous canal, has been arranged under different heads, to which the celebrated Mr. Pott has applied the name of "complete," "incomplete," and "blind" fistula. He calls that fistula complete, when one or more external orifices communicate by one or more internal openings with the canal of the rectum. Incomplete, when there is an external orifice, and no communication whatever with the gut: and blind fistula, when there is no external opening, but when there is an internal orifice communicating with the intestine. The case related is one of incomplete fistula; there was no internal opening, and the head of the probe could not be felt naked, although it could be felt through the walls of the intestine; besides, when the patient passed either flatus or fæces, he was not sensible of either issuing through the opening: all these circumstances are learnt from the history of the case.

With respect to the external opening, when it is situate near to the rectum, there are not many parts to cut through during the operation; but when it is at a distance from the anus, as near to the tuberosity of the ischium, all the intervening parts must be divided, which is a severe operation, and a considerable length of time must elapse, before the healing process is perfected. At other times, there may be more openings than one, and the entire trajet of the sinus is very callous and hard, so much so that in the operation, particularly in incomplete fistula, it not unfrequently happens that the instrument breaks, which is an accident that wears an unfavourable appearance, although it may have been the bounden duty of the surgeon to perform the operation: in private practice, this accident is of more moment, than in the ordinary duties of an hospital: again, in this latter instance, in consequence of the hardness of the part, they are a long time in healing, and remain so, before any impression can be made on them by external and stimulating applications.

Before the operation is proceeded with, particular inquiries should be made into the state of the patient's health, and it is also necessary, that he should submit to an accurate local examination; as either local or constitutional causes are sufficient to forbid the operation: the latter are to be most diligently scrutinized; the former are less devious.

A question thence arises, what are the constitutional causes, which prohibit the operation? If the patient has any cough, thereby indicating an affection of the chest, minute inquiries should be instituted as to the nature and quality of the expectoration, and whether the patient laboured under the thoracic affection previous to, or after the formation of the abscess. The man whose case has been detailed above, had cough and palpitation of the heart long before the local symptoms made their appearance, and in all probability the abscess was owing to the constitutional distress, which had existed for so long a time already, and, if he had been subject to hemorrhoids, was occasioned by the interruption given to the circulation of the venous blood. A slight cause, however, produced the abscess, and it is evident that the fistulæ were consequent to the pulmonary irritation. If, therefore, a patient has nocturnal perspirations, or labours under any of the above symptoms, and if by means of the stethoscope a permanent disease in the lungs is detected, it would be fruitless to perform the operation, the parts would not heal, whilst the hectic fever remained, although but few parts, as in the case before me, were to be cut through, since the probe can be felt almost naked through the walls of the intestine, when it has been introduced into the fistula: besides, his pulse is raised to 120 on the slightest exertion.

Instances, however, are occasionally met with, where the patient suffers from hectic fever, oppression of the chest, cough and expectoration, and where the operation may be after some time performed; but even here, it must be borne in mind, that these symptoms must have been consequent, and not antecedent to the formation of the abscess and subsequent fistula: thus, if a man sits on a damp place, or gets a cold, an abscess may form near the anus, but the constitutional symptoms are only temporary, and by attending to the nocturnal perspirations and advising the patient to a change of air, there will be no constitutional disturbance after the lapse of a few months, when the operation may be undertaken with perfect safety and with every prospect of success; but if the operation had been performed during the presence of the pulmonary affection, he would not recover, as he was not then in a state fit to bear the operation. In the case under investigation, the operation would not have relieved him, as the history of the case demonstrates in the most satisfactory manner, that the patient laboured under pulmonary disease, a long time previous to the occurrence of the fistula for which he was admitted into the hospital.

The local circumstances prohibiting an operation are few, yet they are not to be overlooked: sometimes a fistula in ano is accompanied by a scirrho-contracted rectum, so that when the finger is introduced up the rectum, it is done with difficulty, and when withdrawn it is tinged with blood, and after the examination, the patient experiences excruciating pain: an operation under such circumstances would only tend to an aggravation of the symptoms of the disease, and as there are no specific means of treating the disease of the rectum, it would be madness to operate upon a fistula of this nature, until the means of curing the rectum itself were ascertained. Sometimes there is true cancer of the rectum connected with fistula in ano; this affection when it occurs, is found among old people, when the rectum and accompanying fistula are of a stony hardness, rough and irregular to the touch like a nutmeg-grater, and attended with lancinating pains and an excoriating discharge: an operation in such instances would be highly improper, as also where the patient laboured under any urinary disease. There are also other causes to forbid the operation, as diseases of the neighbouring bones, such as the sacrum, coccyx, and tuberosity of the ischium: these affections are antecedent to the fistula, so that the original complaint must be removed, before the secondary affection can be cured. Again, the fistula may have originated high up along the side of the rectum, far beyond the reach of the finger: besides, the rectum may be surrounded with a deep fissure or ulceration, so as to be completely isolated from the surrounding parts; in such unpropitious circumstances, no surgeon would attempt so hazardous an expedient as an operation.

From a review of the remarks I have just made in relation to the treatment of fistula in ano, it must appear sufficiently evident, that every case is not adapted for an operation; that a nice discrimination is of the utmost utility, and that an accurate history of the cause and course of the disease, and of the state of the constitution in each particular instance, is of paramount importance to the practitioner.

Robert Vogan, M. D., A. B. T. C. D.,
Royal College of Surgeons in Ireland.

BIBLIOGRAPHICAL NOTICES.

Boardman's Essay on the Means of Improving Medical Education.[1]

The author is a young graduate, but not a novice in thinking or in writing. He speaks out boldly, and generally, we think, correctly. There can be no doubt whatever, that medical education—as practically administered—admits of great and most beneficial reform; but all the necessary changes are beset with numerous and, it seems to us, insuperable obstacles. In the overwhelming number of medical schools in this country, it is impossible to obtain universal accordance in any plan that may be proposed. It has been over and over again suggested, that some uniform course might be thought of, provided a convention were to assemble for this purpose; but this convention would never meet with the concurrence of all the chartered institutions—and consequently any plan it might prescribe would be sanctioned only by the parties to the contract. The schools in which the business of teaching is limited to a few weeks would continue to pursue their course; and as the main—and with many the sole—object of the student is too often merely to get his diploma, the evil would scarcely be mitigated. It is true it would be holding up a goal for him, who is desirous of full information in his calling; but how few are there who are anxious to obtain more than a mere license to practice,

After all, indeed, it must be admitted, that the merit of the physician must rest upon himself, and that the diploma is only the pedestal—as Montaigne has remarked—the man himself being the statue; still it ought to be some evidence, that the professional qualifications of its possessor are such, that the community may at least be safe in his hands.

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[1] An Essay on the Means of Improving Medical Education and Elevating Medical Character. By Andrew Boardman, M. D. 8vo. pp. 24. Philadelphia, 1840.

The propositions, which Dr. Boardman recommends for the reformation of medical education, and the elevation of medical character, are the following.

1. Insist on no qualification, as a pre-requisite to a medical diploma, which is not necessary to the practitioner of medicine, and insist on every qualification which is necessary.

2. Regulate the whole course of medical education in accordance with what should be its objects, namely: to so instruct and train a set of men as to impart to them practical skill to fulfil the duties of physicians and surgeons.

3. To secure such qualifications, confer the diploma on no man who does not show, on a rigid examination, that he possesses the necessary ability as well as the necessary learning.

4. To secure zealous and masterly teaching, take from medical colleges the exclusive right of medical instruction, and subject them to the rivalry of individual talent and enterprise.

5. To secure the door of the profession from being opened by kindness, favouritism, or interest, take from medical teachers the power of conferring diplomas, and vest it in a board of examiners appointed for that purpose.

6. To secure examiners of the first ability, let them be appointed by the profession at large, through their representatives, at the state medical societies, and let their office be considered as the most honourable in the profession. To secure disinterestedness in the examiners, allow them to have no connection with the business of education during their term of office, and let no part of their remuneration depend on the number of candidates which they may pass.

7. To secure union among medical men, and uniformity in medical examinations, let the members of the profession throughout the country unite in one body, to be called the Medical University or College of the United States, by sending delegates from each state to a yearly medical congress, the members of which shall first regulate every thing relating to the general welfare of the profession, and then form themselves into boards of examination, and proceed to all the states of the Union for the purpose of examining candidates, and conferring diplomas.

Report of the Friends' Asylum for the Insane, near Frankford, Pa.[1]

We cannot do better than present the following extract from the report of the physicians—Dr. Charles Evans, attending physician, and Dr. Thomas Wood, resident physician—of this excellent institution.

At the date of our last annual report, there were sixty-five patients remaining in the house, since which time there have been fifty-four received; making an aggregate of one hundred and nineteen persons who have been under care during the past twelve months.

The number received during that time, has fallen short of that which entered in the preceding year, arising from the fact, that in consequence of many of the patients remaining a longer time than ordinary after convalescence, the house has been kept almost constantly full; the average number of inmates during each month having been sixty-two; exceeding that of any former year.

[1] Twenty-third Annual Report on the state of the Asylum for the relief of persons deprived of the use of their reason. 8vo. pp. 24. Philadelphia, 1840.

Of the patients admitted during the year, seven were suffering under their first attack of Insanity, and had been affected less than three months at the time of entrance; eleven less than three months, but not with the first attack; twenty-one between three and twelve months; three between one and two years; seven between two and five years; two between five and ten years; and three over ten years. Of the latter, one is becoming idiotic from epilepsy. Of these fifty-four patients, nineteen have already been discharged cured.—The whole number discharged during the year, is fifty-six, and four have died; leaving fifty-nine remaining in the house; of which number thirty-six are males and twenty-three females.

Two of the deaths resulted from acute inflammation of the brain, one from mania a potu, and one from general inflammation of the serous membranes. In all the cases, the patients were dangerously ill when brought to the Asylum, and died within a short time after admission.

Of these one hundred and nineteen patients, sixty-three are males, and fifty-six females: seventy-three are single, and forty-six are or have been married. Their classification and the result of treatment, are as follows:

FIRST CLASS.

Patients diseased less than three months at the time of admission, and the first attack,		8
Restored,	5	
[1]Much improved,	1	
Convalescent,	1	
Died,	1—8	
Under three months but not the first attack,		16
Restored,	12	
Convalescent,	1	
Stationary,	1	
Died,	2—16	

SECOND CLASS.

Over three and under twelve months,		24
Restored,	11	
Much improved,	2	
Improved,	2	
Stationary,	8	
Died,	1—24	

THIRD CLASS.

Between one and two years,		6
Restored,	3	
Improved,	2	
Stationary,	1—6	

FOURTH CLASS.

Over two years,		65
Restored,	4	
Much improved,	3	
Improved,	10	
Stationary,	48—65	

Of the fourth class there are but five who have been deranged less than five years; twelve have been deranged between five and ten; twelve between ten and twenty; ten between twenty and thirty; and four over forty years; four, imbecile from puberty, are included in the number.

Where patients are discharged with certificates of "much improved," and convalescence goes on until health is completely restored, the cure may be justly attributed to the means employed at the Asylum.

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[1] Was well soon after leaving the Asylum.

RECAPITULATION.

Patients in the Asylum 3d month 1st, 1839,	65
Received since,	54–119
Discharged or died,	60
Remaining in the Asylum 3d month 1st, 1840,	59–119
Of the sixty patients discharged there were, restored,	25
Much improved,	5
Improved,	9
Stationary,	17
Died,	4—60
Of the fifty-nine patients remaining in the House, there are restored,	10
Convalescent,	3
Improved,	4
Stationary,	43—59

Of the seventeen patients *discharged* "*stationary*," eight had been deranged more than ten years, two between five and ten years, and three were imbecile from youth.

Of those remaining in the house, *stationary*, four are imbecile, two are epileptics, one has been deranged over thirty years; ten between twenty and thirty; eight between ten and twenty, and thirteen between five and ten years. One entered the institution yesterday.

Six of those remaining in the house, restored, are waiting until sufficient time has elapsed to test the security of their health, and four are old cases of paroxysmal insanity, now enjoying an interval of reason.

Excepting the four cases which terminated fatally, there has been but little serious *acute* disease in the house during the year; and at the present time the patients are nearly all in the enjoyment of good health, with the exception of those lesions of the brain which affect the manifestations of the mind. No accident of a serious character has occurred; and beside the cures which have been effected, the comfort of those individuals, suffering from long standing disease, and who have been brought to the institution with little or no hope of their being restored, has been uniformly augmented, their habits greatly improved, and in many instances their affliction stripped of many of its most distressing characteristics.

In effecting these results, the same combination of medical and moral treatment has been relied upon, which, under the blessing of Divine Providence, has heretofore been attended with the same gratifying success. In the medical prescriptions, we have no favourite remedy to be resorted to as a panacea upon all occasions; but endeavouring to become acquainted with the various morbid conditions which characterize each individual case, the effort is made to adopt such a course of therapeutical treatment as they appear respectively to demand.

The amusement of the convalescent patients, and their employment in some manual labour with a view of promoting their bodily and mental health, has of latter years claimed increased attention in our institution; and the beneficial effects constantly arising from them, prove that they are deserving the care bestowed in their promotion. From the more sedentary habits, and the kind of employment to which all females are more or less accustomed, there is comparatively but little difficulty in furnishing them with occupation suited to their tastes; but the introduction of a *general* system of employment amongst a company of men, many of whom have never been accustomed to labour of any kind, is attended with many more difficulties than those practically unacquainted with the subject, are likely to suppose. We have, however, by the liberality of the managers, succeeded within the last year to a much greater extent than at any former period. In addition to our former resources the work-shop has been greatly enlarged and improved, and the manufacture of baskets has been introduced. From both these, the most decided advantage has been gained; many of the patients becoming permanently interested in the occupation furnished by them respectively, have thereby been enabled to pass away their time agreeably to themselves, while the exercise and amusement thus afforded, have contributed powerfully to the restoration of their health. Connected with this subject we may here say, that in conformity with the experience of all other similar institutions which have made the experiment both in this country and in Europe (numbering twelve or fourteen), we have found no danger in trusting the patients with all such tools as are requisite for carrying on their different kinds of work. No accident whatever has occurred, either to them or to their attendants; nor do we think any need be apprehended, so long as care is taken in the selection of patients to be employed and in having suitable caretakers constantly with them.

During the summer months many of the men spend some hours of the day in working in the garden and on the farm; nor indeed are they wholly debarred from the benefit derived from this kind of employment during the winter, as the care of the stock, &c., affords sufficient opportunity and inducement for some to employ themselves in the open air. As experience has fully proved that exercise in the open air promotes the more speedy cure of the insane, we endeavour to extend to those under our care its advantages, by making it a rule, that whenever the weather will permit, all the patients who are well enough, shall pass a portion of their time out of doors, and by inducing them to engage in some of the various kinds of amusement provided, as playing quoits, ball, walking, &c. Riding in the carriage, and upon the circular railroad, situated in the lawn fronting the house, continue to be favourite sources of health and enjoyment. Most of the patients have continued to meet on one evening in the week during the winter, as a society, for the purpose of engaging in conversation or debate; and a course of lectures on chemistry, illustrated with interesting experiments, has been delivered to them by the resident physician.

We have still cause to repeat the complaint so often reiterated in our former reports, that most of the patients brought to the Asylum, have been allowed to suffer under their diseases, for so long a time, before their friends were willing to place them in an institution prepared expressly for the treatment of the insane, that the probability of their restoration is materially lessened: and also that after recovery has been effected, in too many instances the friends of the patients are persuaded to remove the individual before sufficient time has been allowed for the brain to have its healthy tone corroborated. An improvement however in this latter respect is taking place.

Philadelphia Hospital.

The following Tables contain the cases treated in the different wards of the medical department of this extensive and important charity, during the year 1839. *Attending physicians*, according to seniority of appointment, Samuel Jackson, M. D., C. W. Pennock, M. D., W. W. Gerhard, M. D., and Robley Dunglison, M. D.; *Attending surgeons*, William Gibson, M. D., W. E. Horner, M. D., J. Pancoast, M. D., and Edward Peace, M. D.

Summary of Cases treated in the Men's Hospital, Blockley, from January 1st, 1839, to January 1st, 1840.

MEN'S MEDICAL WARDS.

Diagnosis.	Under 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90	Cured.	Relieved.	Disch'd.	Died.	Rem'ng.
Ascites, ...	0	4	4	1	2	2	0	0	0	6	6	5	2
Anasarca, ...	0	1	0	1	2	1	0	0	0	1	1	3	1
Apoplexy, ...	0	0	1	0	1	0	0	0	0	1	1	1	0
Aneurism of Aorta, . .	0	1	0	1	2	0	1	0	1	0	1	3	1
Arachnitis, ...	1	0	1	1	1	0	0	0	0	2	2	1	1
Asthma, ...	0	0	0	3	0	2	0	0	0	2	2	1	2
Bronchitis, Acute, . . .	2	2	6	5	2	3	1	0	14	3	17	1	3
“ Chronic, . .	0	2	2	1	2	2	0	0	2	5	7	0	2
Coup de Soleil, . . .	0	1	0	0	0	0	0	0	1	0	1	0	0
Congestion of Brain, . .	0	0	1	0	0	0	0	0	0	0	0	1	0
Cholera Morbus, . . .	0	2	1	2	0	0	0	0	5	0	5	0	0
Constipation, ...	1	4	2	3	2	0	0	0	9	0	9	0	3
Cephalalgia, ...	0	1	1	2	0	0	0	0	3	0	3	0	0
Colic, ...	1	0	0	0	0	0	0	0	1	0	1	0	0
Colica Pictonum, . . .	0	0	1	0	0	0	0	0	1	0	1	0	0
Debility, ...	0	0	0	1	0	2	0	0	1	0	1	0	1
Diarrhœa, ...	0	2	9	5	4	2	4	1	16	2	18	6	3
Dysentery, ...	1	4	6	3	5	2	2	0	17	0	17	3	3
Dothinenteritis, . . .	0	2	0	0	0	0	0	0	2	0	2	0	0
Dyspepsia, ...	0	0	2	2	0	0	0	0	2	0	2	0	2
Epilepsy, ...	1	2	0	3	0	1	0	0	0	4	4	0	3
Endo-Pericarditis, . . .	0	0	0	0	1	0	0	0	0	0	0	1	0
Emphysema, ...	0	0	0	0	1	1	1	1	0	3	3	0	1
Excessive Salivation, . .	0	1	0	1	0	0	0	0	1	0	1	1	0
Fever, Intermittent, . .	6	28	12	14	6	2	2	0	67	0	67	0	3
“ Remittent, . .	0	7	3	5	1	4	0	0	17	0	17	0	3
“ Typhus, . . .	2	1	1	0	0	0	0	0	3	0	3	1	0
“ Typhoid, . .	0	3	0	0	0	0	0	0	3	0	3	0	0
“ Catarrhal, . .	0	1	1	0	0	0	0	0	2	0	2	0	0
“ Gastric, . . .	0	0	1	5	2	1	0	0	6	0	6	2	1
Gastritis, ...	0	0	1	4	1	1	0	0	6	0	6	1	0
Gangrene, ...	0	0	0	0	1	0	0	0	0	0	0	1	0
“ of Lungs, .	0	0	1	0	0	0	0	0	0	0	0	1	0
Hypertrophy of Heart, .	0	0	1	1	2	1	1	0	0	2	2	3	1
Hemiplegia, ...	0	0	1	0	2	0	1	0	0	2	2	1	1
Hepatitis, ...	0	1	1	0	2	0	0	0	3	1	4	1	0
Hæmoptysis, ...	0	0	1	2	2	1	0	0	3	0	3	3	0
Inflammation of Spine, .	0	1	0	1	1	0	0	0	1	1	2	1	0
“ Brain, .	0	0	1	0	0	0	0	0	0	0	0	1	0
“ Throat, .	0	1	1	0	0	0	0	0	1	0	1	1	0
Jaundice, ...	0	0	0	0	1	0	0	0	1	0	1	0	0
Lumbago, ...	0	2	5	2	2	0	0	0	8	1	9		2
Laryngitis, ...	0	0	1	0	0	1	0	0	2	0	2	0	0

MEN'S MEDICAL WARDS.—*Continued.*

Diagnosis.	Under 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90	Cured.	Relieved.	Disch'd.	Died.	Rem'ng.
Meningitis, (Tubercular,) .	0	1	0	0	0	0	0	0	0	0	0	1	0
Nephritis, ...	0	1	1	0	0	0	0	0	2	0	2	0	0
Œdema, ...	1	0	0	0	0	0	0	0	1	0	1	0	0
Pleurisy, ...	2	5	4	2	4	2	0	0	16	0	16	1	2
Pneumonia, . . .	0	2	8	4	1	2	1	0	11	1	12	6	0
Pleuro Pneumonia, . .	0	1	1	2	0	1	0	0	5	0	5	0	0
Pneumo-Thorax, . .	0	1	0	0	0	0	0	0	0	0	0	1	0
Purpura, ...	0	0	0	0	0	0	1	0	1	0	1	0	0
Phthisis Pulmonalis, . .	5	19	18	13	6	4	0	0	0	27	27	38	0
Peritonitis, (Tubercular,) .	0	0	1	0	0	0	0	0	0	0	0	1	0
Paraplegia, . . .	0	1	2	2	0	0	1	0	0	4	4	2	0
Pericarditis, . . .	0	1	1	1	0	1	0	0	4	0	4	0	0
Rheumatism, Acute, . .	0	3	9	3	14	2	2	0	20	3	23	0	10
" Chronic, .	0	2	5	3	2	1	2	0	3	11	14	0	1
" Neuralgic, .	0	1	1	4	2	2	0	0	7	3	10	0	0
Ramollissement du Cerveau,	0	0	0	0	1	0	0	0	0	0	0	1	0
Unknown, ...	0	0	0	1	0	0	0	0	0	0	0	1	0
									267	87	354	96	52

Of the above, 63 were coloured. Total number admitted to Men's Medical Ward, 504.

MEN'S SURGICAL, EYE, AND VENEREAL WARDS.

	Under 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90	Cured.	Relieved.	Disch'd.	Died.	Rem'ng.
Amputation, . . .	0	1	2	2	0	0	0	0	5	0	5	0	0
Abscess of Bone, . .	0	2	1	1	0	0	0	0	3	0	3	0	1
" of Glands, . .	1	0	0	2	0	0	0	0	3	0	3	0	0
Amaurosis, . . .	1	1	2	0	0	0	0	0	0	2	2	0	2
Bubo, ...	0	3	5	2	0	0	0	0	7	0	7	0	3
Burns, ...	0	1	4	3	1	0	0	0	5	0	5	2	2
Cataract, ...	0	1	1	1	2	0	0	0	4	0	4	0	1
Catarrhal Ophthalmia, .	0	2	0	0	0	0	0	0	0	2	2	0	0
Caries of Bone, . . .	0	1	0	2	0	0	0	0	1	1	2	0	1
Cancer, ...	0	0	0	1	1	0	0	0	1	0	1	0	1
Conjunctivitis, . . .	0	4	14	6	2	0	0	0	0	19	19	0	7
Chancre, ...	0	2	3	2	0	0	0	0	5	0	5	0	2
Carbuncle of Clavicle, .	0	1	0	0	0	0	0	0	1	0	1	0	0
Contusions, . . .	0	4	5	5	2	2	2	1	19	0	19	0	2
Concussion of Brain, . .	0	0	1	0	1	0	0	0	1	1	2	0	0
Coxalgia, ...	0	1	2	2	1	0	0	0	4	0	4	1	1
Condylomata, . . .	0	0	1	1	0	0	0	0	2	0	2	0	0
Dislocations, . . .	0	1	2	1	1	0	0	0	3	0	3	0	2
Disease of Spine, . .	0	0	1	0	0	1	0	0	0	2	2	0	0
Epistaxis, ...	1	0	0	0	0	0	0	0	1	0	1	0	0
Entropium, . . .	0	0	0	1	0	0	0	0	0	1	1	0	0
Erysipelas, . . .	1	1	1	2	1	0	0	0	4	0	4	1	1
Elephantiasis, . . .	0	0	1	1	0	0	0	0	1	0	1	1	0
Excoriations, . . .	0	2	0	0	0	0	0	0	2	0	2	0	0
Exophthalmia, . . .	0	0	1	0	0	0	0	0	0	1	1	0	0
Fungus Articuli, . .	0	1	0	1	0	0	0	0	0	1	1	1	0
Fistula in Ano, . . .	0	0	2	0	2	0	0	0	3	1	4	0	0

MEN'S SURGICAL, EYE, AND VENEREAL WARDS.—*Continued.*

	Under 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90	Cured.	Relieved.	Disch'd.	Died.	Rem'ng.
Fractures, ...	0	0	7	5	2	1	0	0	12	0	12	0	3
Frosted Feet, . . .	0	0	0	1	0	0	0	0	0	1	1	0	0
Gonorrhœa, . . .	1	12	8	9	1	0	0	0	24	0	24	0	7
Hernia, ...	0	2	5	7	2	0	1	0	6	8	14	0	3
Hemorrhoids, . . .	0	1	0	4	0	0	1	0	1	2	3	0	3
Hydrocele, . . .	0	0	0	1	1	0	0	0	2	0	2	0	0
Herpes, ...	0	0	0	1	0	0	0	0	1	0	1	0	0
Incised wounds, . .	0	5	0	2	2	0	2	2	13	0	13	0	0
Iritis, ...	0	0	2	1	1	0	0	0	3	1	4	0	0
Lacerated wounds, . .	0	2	2	0	0	1	0	0	5	0	5	0	5
Leucoma, ...	0	0	0	1	0	0	0	0	0	1	1	0	0
Luxation of Femur, . .	0	0	1	0	0	0	0	0	1	0	1	0	0
Lupus, ...	0	0	0	1	1	0	0	0	1	0	1	0	1
Opacity of Cornea, . .	0	2	3	1	0	0	0	0	4	2	6	0	0
Ophthalmia, . . .	1	1	0	0	0	0	0	0	0	2	2	0	0
Obliteration of Pupil, . .	0	0	0	0	1	0	0	0	1	0	1	0	0
Orchitis, ...	0	0	2	0	0	0	0	0	2	0	2	0	0
Phimosis, ...	0	1	4	1	0	0	0	0	4	0	4	0	2
Pernio, ...	0	1	2	1	0	0	0	0	2	0	2	0	2
Pemphigus, . . .	1	0	0	0	0	0	0	0	1	0	1	0	0
Psora, ...	1	1	1	0	0	0	0	0	2	0	2	0	1
Rachitis, ...	0	0	1	1	0	0	0	0	1	0	1	0	1
Retention of Urine, . .	0	0	0	1	0	0	0	0	0	0	0	1	0
Scrofulous Ophthalmia, .	1	2	0	0	0	0	0	0	0	2	2	0	1
" Ulcer of Cornea,	0	0	1	1	1	1	0	0	0	4	4	0	0
Stricture of Urethra, . .	0	0	2	2	3	2	0	0	5	0	5	1	3
Scabies, ...	1	1	1	1	0	0	0	0	3	0	3	0	1
Sprains, ...	0	3	4	3	1	0	0	0	11	0	11	0	0
Scrofulosis, . . .	1	3	6	2	1	0	0	0	0	8	8	1	4
Syphilis, Primary, . .	9	14	18	2	1	0	0	0	36	0	36	0	3
" Secondary, . .	5	18	12	2	0	0	0	0	23	8	31	6	4
" Ulcers and Warts,	2	3	2	1	0	0	0	0	7	0	7	0	1
" Rheumatism, .	0	2	4	2	0	0	0	0	3	3	6	2	4
Tinea Capitis, . . .	0	3	2	0	0	0	0	0	1	1	2	0	3
Tumour on Anus, . .	0	0	0	1	0	0	0	0	1	0	1	0	0
Torticollis, . . .	0	0	1	0	0	0	0	0	0	0	0	0	1
Ulcers, ...	2	0	7	10	0	0	0	0	19	0	19	0	0
Ulcers of Leg, . . .	6	77	82	44	10	9	0	0	175	0	175	4	49
Ulcer of Cornea, . .	0	0	2	3	0	0	0	0	4	1	5	0	0
									449	75	524	21	128

Of the above, 71 were coloured. Total number admitted to Surgical Departments, 673.

Total number admitted to Men's Hospital for the year, 1177. Of the above 134 were coloured.

Married, 591; Widowers, 184; Single, 402.

Intemperate, 713; Moderate, 257; Temperate, 207.

Occupations.—Accountants, 13; Bookbinders, 16; Brick Makers, 34; Blacksmiths, 17; Butchers, 9; Barbers, 12; Coach Makers, 13; Coopers, 24; Carpenters, 59; Coppersmiths, 23; Dyers, 19; Engravers, 9; Farmers, 61; Gardeners, 19; Hatters, 41; Jewellers, 12; Lock Makers, 21; Millers, 11; Machinists, 10; Printers, 34; Porters, 26; Paper Makers, 16; Painters, 10; Saddlers, 33; Shoemakers, 96; Sailors, 59; Silversmiths, 9; Tailors, 81; Turners, 19; Tanners, 27; Tinsmiths, 15; Trunk Makers, 43; Watch Makers, 8; Weavers, 67; Without trades, 215.—Total, 1177.

(*To be concluded in the next number.*)

MISCELLANEOUS NOTICES.

Sir James Clark.—The statement, with which this distinguished and estimable physician has favoured us, completely exonerates him, in our opinion, from the charges that had been brought against his professional as well as private deportment. Placed in the most trying situation, that can well be imagined, in the case of Lady Flora Hastings, he appears to have acted throughout with signal delicacy. It has been suggested, that on no account ought he to have sanctioned the suspicions that were entertained in regard to the pregnancy of the lamented lady; but the statement—which bears all the marks of being as ingenuous as it is able—shows, that he went no farther than the circumstances of the case warranted, and that under the equivocal appearances which Lady Flora presented, and in the court of a virgin sovereign, it was both delicate and judicious in him to state to his patient the suspicions that were entertained, and to be anxious that her character should stand forth unsullied. In the execution of this painful duty, Sir James, we repeat, appears to have acted with the most scrupulous delicacy; nor can we see the slightest reason for the opinion, that he has suffered himself to be made a tool of for the furtherance of political or private malice.

Medical Convention at Philadelphia.—This has turned out an abortion. Not even the mover of the resolution in the Medical Society of the State of New York was present, and but few delegates presented themselves, among whom was Dr. Beck, of Albany—the well known author of the best book we possess on Medical Jurisprudence.

Personally we are thankful for the proposition, inasmuch as it brought among us our distinguished friend even for a short period.

Chorea in New York.—We had not the least idea from our own not very limited observation, that chorea was so frequent in any part of the country, as we see stated in a late number of the New York Journal of Medicine, (ii. 275), in which Dr. Reese affirms, that he himself has employed arsenic in "*over two hundred cases.*"! The number treated by other remedies he has not stated: yet chorea is not a common disorder anywhere; of 32,976 children admitted into the Hôpital des Enfans, of Paris, in ten years, 189 only were affected with it.—(*Rufz.*)

Worm in the Eye of the Horse.[1]—Dr. Dunglison referred to a curious but not unique case, of a worm in the eye of a horse now in Baltimore.

The particulars were contained in a letter to him, from Dr. Joshua J. Cohen, of Baltimore. This entozoon is a species of filaria, (see *Filaria Papillosa*, Rudolphi, Synops. p. 213,) probably from three and a half to four inches in length, and situate in the aqueous humour, in which it moves about with great activity, but its motions are so constant, that it is difficult to appreciate its exact length. The great size of the anterior chamber of the horse's eye, affords it ample space; and through the transparent cornea, it can be observed as well as if it were in a glass vessel. The horse was sent up from Calvert county, Maryland.

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[1] Bulletin of the proceedings of the American Philosophical Society, vol. i. No. ii. p 200, for March and April, 1840.

Dr. Dunglison made some observations on the difficulty of accounting for its presence in this shut sac, and alluded to the different views of distinguished naturalists as to the generation of many of the lower tribes of the animal kingdom—some presuming that they may be formed spontaneously, whilst others consider that the germs must always be received from without. The difficulty, he observed, applied to all the entozoa that infest the animal body; and this case was certainly not more difficult of explanation, than that of entozoa found in the intestines of the fœtus in utero.

Dr. Bache referred to a similar case, which was published in an early volume of the Transactions of the Society, (Vol. ii. p. 183: by F. Hopkinson, Esq., and *Ibid.* p. 383, by Dr. Morgan.)

On the ethereal solution of Ergot. By J. C. W. Lever.[1]—[We would refer our readers to Dr. Hooker's views on the effect of an ethereal preparation of Ergot, which he regards as narcotic but not ecbolic. Boston Med. and Surg. Journ., x. 298; American Medical Intelligencer, Dec. 15, 1837, and the Editor's New Remedies, p. 409. Philadelphia, 1839.—Ed.]

Having made repeated trials of a preparation of ergot given to me by my friend Dr. G. O. Rees, I have been induced to request from him the method of its preparation, in order that I may lay it before your readers.

Although by no means a strenuous advocate for the common employment of the ergot, yet I am prepared to admit its efficacy and value in cases of protracted labour, where the presentation is natural, the pelvis of standard size, where the soft parts are dilated and fully prepared to admit the passage of the child, where uterine effort alone is wanted to complete the labour, and where there are no contraindicating circumstances forbidding its exhibition. In cases of this description, I have used the preparation, and have seen it employed by others, with complete success. I have also tested its efficacy in hemorrhage occurring after the birth of the placenta, when the uterus has not contracted well, or where its contraction and dilatation alternated. In cases of this description, the exhibition of the ergot has been followed by a permanent contraction of the viscus, thus preventing inordinate discharge. In passive menorrhagia, when there exists no organic lesion, this form of medicine will be found of great value; the discharge is generally lessened after the exhibition of the second dose; and in no case in which I have given it, has it failed ultimately to put an end to the bleeding.

All the other preparations of ergot with which I am acquainted not unfrequently produce nausea, sickness, headach, falling of the pulse, dilatation of the pupil, &c.; but in no one instance have I seen these symptoms produced by the ethereal solution: they most probably are caused by some constituent in the drug which ether does not dissolve. I have given the solution to puerperal women in doses varying from gtt. xv. to gtt. xxx. dropped upon a lump of sugar, and have found that uterine action has commenced in twenty minutes or half an hour. In cases of menorrhagia, I have given gtt. v. to gtt. viij. three times a day, and have not had reason to persevere in its employment more than four or five days.

The advantages of this form of the drug may, I think, be stated as, first, the convenience of its exhibition; secondly, the certainty of its operation; and, thirdly, its non-production of those unpleasant and sometimes dangerous symptoms so frequently caused by the other preparations of the ergot. With regard to the method of its preparation, Dr. Rees writes to me as follows:—

"The ethereal solution, the properties of which you have so well tested, was prepared by digesting ℥iv. of the powdered ergot in f℥iv. of ether during seven days. The result was a solution of the fatty matters contained in the drug: this was poured off, evaporated to dryness, and the residue again dissolved in f℥ij. of ether. I have since tried to re-dissolve in alcohol, but the fatty matter appears to contain myricin, which resists that menstruum even at a boiling heat. The solution should be kept in a well-closed glass-stoppered bottle, to prevent evaporation. Each ounce of the preparation may be considered as equivalent to two ounces of the ergot, or gtt. xv. to a half-dram dose of the powdered drug. Should there be any objection to the administration of the ether, the practitioner has only to drop the required dose upon a piece of lump sugar, and expose it to a current of air for a few minutes, when the fluid will completely evaporate. I regret that I have not had leisure to procure the different fatty matters of the ergot in a separate form, and so subject each to trial as a medicinal agent. If this were done, there is little doubt but that a still more convenient form for exhibition might be obtained, and the peculiar action of the drug traced to its true source. It appears highly probable that the fatty matter contained in the ergot is peculiar in character: from one specimen which I examined, I obtained a fat which, when treated with strong sulphuric acid, became a fine green colour—a reaction which I am not aware has ever yet been noticed as occurring with any fatty substance either from the vegetable or animal kingdom."

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[1] Lond. Med. Gaz., April 10, 1840, p. 108.

Yellow Liquor Amnii.[1]—Dr. Purdon, in a paper read before the Dublin Obstetrical Society, mentioned a case, in which, on rupture of the membranes in a woman affected with jaundice, the liquor amnii exhibited a deep yellow colour.

Treatment of Syphilis.[2]—M. Ricord has recently made some observations on the treatment of syphilis, in a French journal, of which the following is the substance.

M. Ricord divides the progress of syphilis into three stages or phases. In the first, the action of the virus is completely local; in the second stage, the accidents are confined to the skin, or mucous membranes, and are characterised by the fact that the morbid products are incapable of producing the original disease, on inoculation. The symptoms of the third stage rarely occur before the seventh month, and are incapable of being transmitted by hereditary disposition: this is their characteristic mark.

M. Ricord considers the mercurial treatment to be more frequently injurious than useful in the first stage. On the contrary, mercury is absolutely necessary in the second stage.

Where the tertiary symptoms alone exist, M. Ricord has generally recourse to the ioduret of potassium. He begins with doses of ten grains in the following manner:—

Distilled water, 3 ℥;
Ioduret of potassium, 10 grs.;
Syrup of poppies, 1 ℥.

This potion is taken in three doses, during the day, with sarsaparilla, the quantity of the ioduret gradually increased every five days, until the patient takes 100 grains a day.

Whenever secondary symptoms coexist with the tertiary, M. Ricord administers the proto-ioduret of mercury in the dose of a grain, gradually increased to six grains.

New Treatment of Cancer.[3]—M. Jobert has endeavoured to check the progress of this terrible malady, by tying all the vessels and dividing all the nerves which are distributed to the affected part. His efforts, however, have not been crowned with success.

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[1] Dublin Journal, and Lond. Med. Gaz., April 10, 1840, p. 128.

[2] Abridged from L'Experience, No. 141; and London Lancet, April 11, 1840, p. 112.

[3] L'Experience, l. c.; and Lond. Lancet, April 11, 1840, p. 112.

In four cases of cancer of the lip M. Jobert tied the facial and coronary vessels, and divided the branches of the fifth nerve, which pass to the lip. The ligature of the vessels caused some improvement in the appearance of the ulcers, and on dividing the nerves the pain was removed; but in all cases he was compelled to extirpate the disease, at last.

Peculiar Intestinal Concretion.[1]—Dr. Bright exhibited an intestinal concretion or calculus, chiefly remarkable from its being composed simply of phosphate of lime, surrounding a neucleus of fæces. The patient from whom it was taken was under the care of Mr. Stone, and was six years of age. The symptoms presented were those usually observed in fæcal abscess; there was a swelling on the right side of the abdomen, attended by gradual emaciation, and there was a discharge of pus and mucus, occasionally, from the bowels. In addition, however, to these symptoms, there was a discharge of puriform fluid from the bladder. The child died in twelve weeks after the first attendance of Mr. Stone. On examination, great suppuration was found at the caput coli, in which were two calculi; the one exhibited, which was about the size of a pigeon's egg, and another about half the size. From the composition of the calculi, it was at first suspected that they were formed in the kidney, and had escaped by ulceration through the right ureter; careful examination, however, proved this opinion to be erroneous. The calculi were formed of successive layers of phosphate of lime; the nucleus was a small portion of fæces. In another instance, under the care of the same practitioner, a number of calculi, of the same composition, had passed away from the rectum with the fæces.

Mr. Alcock remarked, that the phosphate of lime calculus was usually the result of chronic irritation of the mucous membrane of the bladder. Might not the intestinal irritation account for the formation of the bodies in the case under discussion?

Mr. Erasmus Wilson had in his possession a portion of a colon in which there were a number of pouches containing calculi, probably composed of the phosphate of lime.

Statistics of Insanity in France.[2]—During the last eight years 1045 insane patients were received into the Lyons' Hospital. Of these, 503 were males, and 542 females. The various causes of insanity, amongst the patients, were as follows:—

Females, 542.—*Physical.*—Hereditary disposition, 56; drunkenness and debauchery, 43; puerperal accidents, 45; disordered menstruation, 25; venereal disease, or mercury, 5; retrocession of cutaneous affections, 23; onanism, 17; injuries of the head, 3; solitary confinement (*isolation*), 6.

Moral.—Domestic afflictions, 65; poverty, 47; loss of fortune, 31; love and jealousy, 33; fright, 8; religion, 29; politics, 11.

Males, 503.—*Physical.*—Hereditary disposition, 62; drunkenness, 54; apoplexy, 25; onanism, 21; syphilis, or mercury, 5; injuries of the head, 6; solitary confinement, 9; retrocession of cutaneous diseases, 14.

Moral.—Domestic trouble, 65; poverty, 56; loss of fortune, 36; politics, 16; jealousy, 14; religion, 12; fright, 6; excessive study, 8.

Of the 542 females, 114 were discharged perfectly cured; 91 were withdrawn by their friends, improved; 162 died; 175 remained in hospital on the 1st of June, 1839.

Of the 503 males, 149 were cured; 61 withdrawn; 158 died; and 135 remained in hospital. Hence the proportion of cures for the females, was 1 in 5; and for the males, something more than 1 in 5.

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[1] London Pathological Society, in Lancet, March 28, 1840, p. 26.

[2] Gaz. Med., No. 11, 1840, and London Lancet, March 28, 1840, p. 27.

Midwifery Practice.[1]—The following is a summary of the labours which occurred in the practice of Janson the elder, of Ghent, during forty-one years, from Jan. 1, 1797, to Dec. 31, 1837. Thirteen thousand three hundred and sixty-five women bore 13,439 children, of which 6,611 were boys, and 6,828 girls; out of 157 cases of twins, in 38 they were both boys, in 62 both girls, and in 39 one of each sex; eight twins were born dead; there was one case of triplets, all girls; 859 were natural children. Three hundred and forty-one labours required the forceps, and 484 preternatural labours were terminated by the hand. In 150 the foot presented, in 30 the hand, in 97 the breech, in 20 the breech had descended into the smaller cavity of the pelvis; 2 breech presentations required the application of instruments. In 15 cases the face presented; in two face presentations the forceps was required. In 86 cases the funis presented, and 46 of these children were delivered alive by turning; 38 died through the compression of the funis; and 6 were delivered alive by the forceps, in cases where the funis preceded the head. Seven times the placenta was upon the os uteri. Perforation was performed five times; once the symphysis pubis was divided, and a cure took place; once both mother and child died suddenly, the child being thrown into the abdomen by a spontaneous laceration of the uterus. Superfœtation occurred twice; one child was at its full time, the other three months old. Convulsions and sudden death occurred thrice, and serious hemorrhage before delivery four times. It is to be remarked that M. Janson practised for 15 years before 1797, without keeping notes.

Mammary Abscess mistaken for Scirrhus.[2]—The best surgeons, it must be confessed, are sometimes mistaken in the diagnosis of disease. The following is an example:—

C. C., 28 years of age, not married, perceived, about two months ago, a tumour in the left breast. She consulted M. Roux, who advised her to enter the Hotel-Dieu. M. Roux examined the breast on several occasions: there was no apparent knottiness or fluctuation; the colour of the skin was normal; nevertheless M. Roux determined on operating for supposed scirrhus. Two semielliptical incisions, about four to five inches in length, embraced the greater part of the mamma, and the surgeon was about to extirpate the gland, when an accidental touch of the scalpel near the lowest point of the tumour, gave issue to an immense quantity of pus. The operation was, of course, suspended, and simple dressings were applied. The patient soon recovered.

BOOKS RECEIVED.

From the Author.—An Essay on the means of improving medical education and elevating medical character. By Andrew Boardman, M. D., (Presented to the Faculty of Geneva College, January, 1840.) Extracted from the Eclectic Journal of Medicine, for April, 1840. 8vo. pp. 23. Philadelphia, 1840.

From the Society.—Transactions of the Medical Society of the State of New York, Vol. iv. P. 3. 8vo. pp. 290. Albany, 1840.

From the same.—Report of a Committee of the Medical Society of the State of New York on the subject of Medical Education. 8vo. p. 23. Albany, 1840.

From Dr. Warrington.—Twenty-third Annual Report on the state of the Asylum for the Relief of Persons deprived of the use of their reason. 8vo. pp. 24. Philadelphia, 1840.

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[1] Bull. de la Soc. de Méd. de Gand and Schmidt's Jahrbücher, and Lond. Med. Gaz., March 6, 1840, p. 893.

[2] French Lancet, No. 10, 1840, and Lond. Lancet, March 21, 1840, p. 968.

THE

AMERICAN MEDICAL INTELLIGENCER.

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For the American Medical Intelligencer.

ART. I.—CASE OF RADICAL CURE OF UMBILICAL HERNIA.

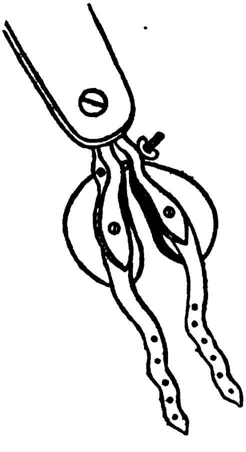
BY W. B. DODSON, M. D., OF LOUISVILLE, KY.

Louisville, April 4, 1840.

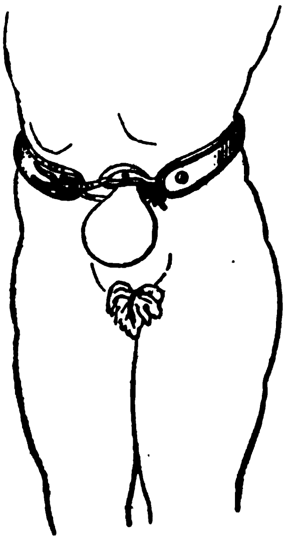
By the advice of my very worthy friend Dr. Galt, I was called to see a small coloured boy, belonging to D. Strother, Esq., aged about two years and eight months, affected with congenital umbilical hernia, which was reduced without any particular difficulty, but reappeared, as soon as he assumed the erect position, to its full extent. He was healthy, and remarkably large and active for that age. The pain and distress about the umbilicus gradually augmented as the protrusion became larger.

The sac or external tumour was three and a half inches in length and about three inches wide, or across from side to side, formed of the integuments around the umbilicus by the constant protrusion of the intestine, and propulsion of the abdominal viscera.

The umbilical arteries were plainly and distinctly felt beating on each side of the neck of the sac, which was about one and a quarter inch in width (from side to side) and three quarters of an inch thick (vertically). Not having such an instrument as was desired, I applied a more common one, with the inferior third of the block cut away—supporting the sac with an appropriate bandage—8th, saw the patient and adjusted the instrument—16th, the sac contracted, thickened, and more firm—made some alteration in the instrument and re-applied it.



From this time until the 21st of June, I saw him frequently, and he appeared to be doing as well as I could have expected with the kind of instrument then in use. At the last named date I applied a newly constructed truss which fitted well, the blocks were made to grasp the neck of the sac with considerable firmness, so as in part to arrest the circulation. On the 22d, I found a sufficient degree of irritation developed to require a less degree of pressure. July 1st, adjusted the instrument owing to a slight superficial ulcer—3d, doing well—about this time the patient was sent into the country for four or five weeks, during which time the instrument became misplaced, and on his return to the city I found a slight protrusion of



the hernia on the right and inferior edge of the ring, probably as large as the end of my index finger. I re-adjusted the instrument, from which time the patient went on doing well, and the ring very speedily closed up. I saw him at intervals, but nothing of importance occurred until the 28th of November, when I was sent for to see the patient, as he had fallen from a fence and misplaced the instrument, which caused a small ulcer on the superior part of the neck of the sac. Upon a thorough examination, the cure was found to be perfect—I then determined to remove the remains of the sac with the knife, which I did the following day (29th), in presence of Drs. McDowell and Wilson, of the Louisville Medical Hospital. Dressing simple—December 1st, dressed the wound, which looked well—2d, doing well—4th, do.—8th, nearly healed—14th, perfectly well. The use of a muslin bandage will be continued for several weeks. He was a favourite boy, consequently his crying and screaming most inordinately, during the application of the dressings, could not be controlled, which thoroughly tested the strength of the parts.

Art. II.—REPORT OF THE MINORITY OF THE SELECT COMMITTEE OF THE ASSEMBLY OF THE STATE OF NEW YORK, ON THOMSONIANISM.

[In the following report—which we are grieved to say proceeded from a *minority* of a select committee of the Assembly of the State of New York—made on May the 12th, 1840, there is Pickwickian humour, with much good sense and fair argument. Mr. Clarke, we understand, is a lawyer. How much it is to be regretted, that all his fellow members in the assembly, and the community in general, are not equally well informed. The report is interesting in another respect. It contains, within it, an exposition of the *principles* of the Thomsonians from the pen of one of their own oracles.—Ed.]

Mr. C. E. Clarke, from the minority of the select committee to which were referred the numerous petitions asking a change of the law towards certain practitioners in medicine, known as Thomsonian practitioners, reports:

That the petitions are very numerous, perhaps more so than on any other subject which has occupied the attention of the present legislature. The rolls of petitions, and the list of names, are amazing: amounting to more than 36,000. On examining them, however, it appears that they are not the growth, produce and manufacture of any one single year, but of ten long years—the same length of time that was occupied in the siege of Troy—the tithe of a century. On inspection of these antiquated rolls, some of which bear that smoky and venerable appearance which characterizes the manuscripts which are excavated from the ruins of Herculaneum, the committee discover the names of many who have long since departed—left the warm precincts of celestial day, and who, by the act of their departure, have given another melancholy proof that man is mortal; and that though his life may be sweetened and his days prolonged by that ministering angel, the physician, that to man there is an appointed time, even though he may have full faith and confidence in the infallibility of the doctor of his choice.

The committee are the friends of petition in its most enlarged sense; but they think that there should be some limit even to this right; and that as all temporal rights and privileges close with life, it seems that a good stopping place should be the grave, the more especially, as in the grave there is neither knowledge nor device.

In this enterprising, stirring, speculating, go-ahead country, changes of location and changes of opinion are of every day occurrence; and it is by no means to be inferred, that because an individual signed a petition ten years since, that he is in favour of the principles of that petition now. This fact is illustrated in the petitions now under consideration. In 1830, a law existed which imposed a fine of twenty-five dollars on every person who should, without being authorized by law, practise physic or surgery; and no person was authorized by law to practise physic or surgery, till he had arrived at the age of twenty-one years; and until he should have pursued the study of physic and surgery four years with some physician and surgeon authorized by law to practise as such, and had been duly examined by and received a diploma from the censors appointed by law to take such examination.

At the instance and request of those styling themselves Thomsonian doctors, and those friendly to them, this law was so far modified, as not to prohibit any person from administering to the sick, any roots, barks, or herbs, the produce of the United States.

There is still a further provision, that any person not authorized by law to practise physic and surgery, shall be incapable of recovering by suit, any debt arising for such practice. The essence of the law is this: any person, whether young or old, male or female, in short, any being who can be distinguished by the name of "*person*," may practise as a physician and administer to the sick, roots, barks, or herbs, the growth of the United States; but he shall not, unless authorized by law to practise as a physician and surgeon, be allowed to sue for and recover at law, for such services. But if any person, not an authorized physician, shall administer to the sick any roots or herbs, or barks not the growth of the United States, or any other medicines, he shall not be allowed to collect pay for the same, and shall be subject to a fine of twenty-five dollars.

He who should as a physician administer a portion of sulphur, or salts, or magnesia, or Peruvian bark, aloes, gum arabic, or myrrh, or camphor, or opium, medicines of well known properties, and of most salutary effect, cannot collect pay for his services, and is subject to a fine of twenty-five dollars. While he who shall administer lobelia, or tobacco, or red pepper, or any other poisonous root, herb, or bark, is exempt from any such fine, provided the poison grew in the United States.

It is not the object or intention of the minority of the committee to criticise this law, though they cannot discover any reason why it should not be as safe and proper, and lawful to administer salts and sulphur, or camphor, or gum arabic, or Peruvian bark, as the meats of the peach stone, red pepper, or lobelia. The committee only refer to the fact to show that so far from dealing harshly towards this class of physicians, the legislature has actually strained a point in their favour, and have treated the person who uses the medicines which have been in use a thousand years, as though he was a dangerous man, and his medicines exclusively to be guarded against.

Of the 36,000 petitioners, whose names have been this winter presented to the legislature, 12,418 pray for the repeal of the law which subjected to a fine of twenty-five dollars, any person who should practise as a physician without being authorized by law. The committee take leave to say that so far as this class of physicians is concerned, this law has been repealed many years since. This class of physicians and their peculiar medicines, have been exempted from the operation of a law which they stigmatise as severe, against natural rights, inhuman and unconstitutional, while those who presume to practise as physicians without a license, with myrrh, aloes, salts, camphor, and Peruvian bark, are still subjected to this same "inhuman" and unconstitutional law, and submit without murmur or complaint.

It appears to the minority of the committee, that the law thus far, so far from being partial against the Thomsonians, is very partial in their favour, and that if any persons have occasion to complain of "monopoly" and "severity" of law, it is those who have been prevented from using, as physicians, those medicines which have been known as salutary for thousands of years.

The committee further report that it is idle, to say the least, to overwhelm the legislature with petitions for the redress of a grievance which has long since been redressed, to petition the legislature for the repeal of a law which has long since been repealed.

Of the remaining petitions 6,476 pray for the repeal of that portion of the law which prohibits any person, practising as a physician or surgeon, without being licensed, from collecting pay for his services.

This law is equal and impartial; it extends to all. The legal qualifications required in order to enable a physician to collect pay are the same to all; the Thomsonian may, if he chooses, become licensed just as easily as any other, and being thus licensed, has full liberty to practise in his own peculiar way and with his own peculiar medicines, and to recover by law for his services.

It must always be borne in mind that this class of physicians are not prohibited from using their own peculiar medicines and practising in their own way, and that if they will study the prescribed length of time and in the manner prescribed by law, they have full liberty to receive whatever compensation the person administered to sees proper to pay; and that this is greater liberty than is granted to any other unlicensed physician. The question then is simply this: Shall the law give to any person, no matter who or what, the power of the law to enforce the payment of a claim for medical services? No fact is better established than this, that diseases become less dangerous, far less deadly, as we become acquainted with their nature and cause. It would seem that to become acquainted with the nature and cause of disease, an intimate knowledge of anatomy and physiology was absolutely necessary; and that to administer successfully, to their age and experience, the knowledge of the nature and power of medicines was equally necessary; and this would imply a knowledge of materia medica and chemistry.

The committee had progressed thus far in the investigation, and discovering that there was a great diversity of opinion amongst the petitioners, and that while about 6,000 prayed for unrestricted liberty, 17,000 prayed for restrictions, took some pains to ascertain what was the nature and extent of the restrictions for which the 17,000 petitioners prayed, and for that purpose they gave notice to Dr. John Thomson of this city, through whose means most of the petitions were presented to this house, and who is the son of the founder of this system of practice.

It was ascertained that there is a medical society in this state known as the New York State Medical Thomsonian Botanical Society; that Dr. John Thomson, of the city of Albany, is its president. This gentleman furnished the committee with his views in writing upon this interesting subject, which cannot, perhaps, be better expressed than in his own words, which the committee take leave to present.

It seems that the learned president of the N. Y. S. M. T. B. S., is *himself* of opinion that one year's study is necessary in order to qualify a physician; and that he should be of mature age, and should be examined by

Thomsonian censors, and should have a diploma from the said society, as evidence of such qualification, before he was admitted to practise or collect pay.

This he explains is the meaning of the 17,000 petitioners who have signed the following petition.

"*To the Honourable Legislature of the State of New York, in Senate and Assembly convened:*

"We whose names are hereunto subscribed, being citizens of the county of Orleans and state of New York, most respectfully beg leave to state to your honourable body, that there exists in this state a numerous and respectable class of medical men, called 'Thomsonian Physicians,' whose theory and system of medical practice differs so essentially from the legally established medical practice, that the existing medical laws of this state, instead of encouraging and protecting them in their efforts to improve and simplify the healing art, tend materially to embarrass and paralyze their exertions, by depriving them of legal aid in collecting their dues.

"We therefore pray your honourable body, during your *present session*, to enact a law, which shall enable this class of physicians to collect pay for services rendered in attending the sick; especially those who are, or may hereafter, become members of the Thomsonian Medical Society of the state of New York, and have received, or may hereafter receive, diplomas therefrom."

The committee at this point encountered a disagreement amongst doctors—and the duty seemed to devolve upon them of solving a difficulty which was embalmed in an adage a thousand years ago—"when doctors disagree who shall decide."

According to modern political parlance, here are 6000 petitioners asking for the "*largest liberty*," and 17,000 with the learned Dr. Thomson at their head asking for restriction—monopoly. This great discrepancy of opinion strikingly illustrates a well known principle in human nature.

Our good ancestors, the Puritans, took much merit to themselves, for crossing the wide ocean, bidding their native land good night, and taking up their abode in voluntary banishment, that they might enjoy religious liberty; but they had no sooner got here than they showed that though Puritans, they were still men, and thought that true genuine religious freedom consisted in every man being subjected to the same rules, belief, faith, and practice as the Puritans; and when a few plain Quakers appeared amongst them, they were banished by these lovers of religious freedom, for opinion's sake.

Here are the same men who ten years ago, only wanted the liberty of administering to the sick without being subjected to a fine. Next, they want that the law should sanction their practice by enabling them to collect their debts by law. Now they say and pray that no one should be permitted to collect debts except they have studied a year and received a diploma from the N. Y. S. T. B. M. S.

Behold—"the advocates of the *largest liberty*"—of inherent rights—of alleged constitutional liberty—have become the open and avowed advocates of restriction—of monopoly.

With the intention of ascertaining whether it would be for the health of the people of this state to encourage by legal enactments a new system of medical practice, the committee took some pains to ascertain the principles upon which the Thomsonian theory was based, and were informed that a fundamental principle was this; that all disease consisted in *obstruction*, that obstruction produced irritation—irritation, suppuration, and suppuration, death.

That the first object was to remove obstruction—the second to allay irritation—the third to prevent suppuration, and that failing in this, death must ensue.

Q. Who are those whom you wish should have lawful authority to collect their debts? A. Those only who have studied and practised in company with a member of this society one year, and have undergone an examination before the board of censors, and received a diploma as evidence thereof.

Q. What books do you and your pupils study? A. Thomsonian Guide to Health, by Sam. Thomson; Hearsey's Midwifery; Rafinesque's and Barton's and Bigelow's Botany; the Thomsonian Recorder, a semi-weekly medical paper, published at Columbus, Ohio, and Botanic Sentinel, Philadelphia.

Q. Do you think the study of anatomy or physiology of the least use to a Thomsonian doctor? A. We do not, nor do we recommend the studies. We do not consider ourselves as surgeons, and those studies are useful only to them.[1]

Q. Are the Thomsonian doctors midwives? A. We are midwives, and the most successful of any in the country.

Q. Do you ever, in any case, bleed? A. Never, in any possible case.

Q. What stimulant do you use? A. Our chief stimulants are cayenne pepper, lobelia and aromatic herbs; no alcohol, no wine, no opium, no ether.

Q. Do you use any things as medicines, except vegetables? A. No; we consider all other medicines poisonous, whether they be elementary or natural or artificial compounds; every metal or compound of a metal. This extends to all mineral waters, no matter how popular; we consider them all deleterious, and of course poisonous. One of our apothegms is, that the metals and minerals are in the earth, and being extracted from the depths of the earth, have a tendency to carry all down into the earth, or, in other words, the grave, who use them. That the tendency of all vegetables is to spring up from the earth. Their tendency is upwards; their tendency is to invigorate and fructify, and uphold mankind from the grave.

Q. In what light do you view, and in what estimation do you hold those who, having little experience, and under your father's patent, have a right to practise as a Thomsonian doctor? Do you view them qualified or not; skilful or not? A. We do not consider them fit, as general practitioners; they have merely the right to compound their own medicines, and practise in their own families; and have no right or business to practise on the community; they are not presumed to be acquainted with disease or medicine, and should not be tolerated to practise, or to collect their pay for their services; community is in danger from these unskilful practitioners. There are thousands of this stamp all over the United States. If these men ever acquire experience and skill, it is by practising upon community and at its expense.

" *To the Hon. Messrs. Farrington, Clarke, and Wheaton, to whom were referred the petitions of the Thomsonian Botanic Physicians of the state of New York.*

Gentlemen, you have propounded to me the following questions, to be answered in writing, viz:

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[1] [How does this accord with the celebrated resolutions passed by the Thomsonian Medical Society of the state of New York, in June last, when flushed with the honour of the permission granted them by Dr. March to visit the Albany Medical College, they resolved, " that as it is in the opinion of this society necessary to raise the standard of medical education among Thomsonian physicians, we recommend the students of the Thomsonian School to acquire a more thorough knowledge of anatomy, physiology, surgery, and chemistry. See Intelligencer, for July 1, 1839, p. 112.—Ed.]

Firstly. What reason does Doct. Thomson give for asking that the right to collect pay by law, should be confined to those who shall hereafter become members of the New York State Thomsonian Botanic Medical Society?

Secondly. Does he want that society to be incorporated, and if so, under whose direction and superintendence shall it be?

Thirdly. Who shall prescribe the course and length of study for students?

Fourthly. What principles do you practise on?

Fifthly. What books do you study?

Sixthly. How long a time?

Seventhly. What studies are those which the old practitioners pursue which you deem useless?

In the first place, why is here a system of medicine springing into existence so opposite to the principles of the long established and popular systems of the present age? I answer, that it was by the failure of this old established system of medicine to restore those to health whom we are accustomed to cherish above all other earthly objects; that the human mind was led to wander into the wide regions of philosophy, unguided by any human theory except reason and common sense. My father had been much subject to sickness in his family, and was anxious to have the best medical attendance in his vicinity; he actually employed the best physician within several miles to remove and locate himself upon his farm, and while the doctor was yet a resident upon his farm and within the space of a few years, five different members of his family had been pronounced as incurable by this same physician, and when the patient had been thus abandoned, my father was first stimulated to try what he could do to alleviate or mitigate the sufferings of the patient, and happily succeeded in restoring every individual to health; now, says my father, if this long established system of medicine fails to restore the different members of my family, and I then take hold and do for them what was expected from those who professed superior skill, is not my treatment the best. From that time forward, which is now near fifty years, he has never employed a regular physician to the knowledge of the writer. The neighbours who were called together to assist at his house, as is usual in country neighbourhoods in time of sickness, and more especially when the patient was supposed to be dangerously ill, were led to observe the least change that took place with the patient, and observing the happy effects of my father's nursing upon the members of his own family, became the first messengers to herald the Thomsonian system of medicine to the world. In the course of time many of the relatives or friends of those kind neighbors were stricken down by the hand of disease, and the physicians being employed as usual, as the best judges of remedies for the sick, as in the case of my father's family, in many instances gave the patient over as incurable. The human mind being now upon the rack for any thing that would in the least mitigate the pains of the sufferer, it would be remarked, why not send for Samuel Thomson, and have him nurse the patient as he does those of his own family. This course was usually adopted, and I have no knowledge of his ever losing a patient in his own neighbourhood.

Thus his plan of nursing was adopted by the near neighbours, and from them it went from house to house, from town to town, and from state to state, until it is now more or less known in every state in the Union; and the advocates or friends to the system are computed by the celebrated Doct. Benj. Waterhouse to amount to upwards of 3,000,000. It was by their philosophical experiments and the happy results attendant upon the same, that first led my father to exclaim, in the language of the poet, surely the "*greatest study of mankind is man.*"

Having been thus successful in his nursing, he was led to inquire upon what principle the animal functions were brought into action, and by what principle they ceased to act. The practical operations of his medicines were narrowly investigated; and a reason for the specific operation of each medicine upon the system was required. My father at last settled down in the belief that the human system was a species of animal machine, subject to the action of the elements, and when deranged, was to be put in order by a judicious temperament of the same elements by a skilful repairer, whose duty it is to know, *particularly*, the principle by which the machine is deranged; and, understanding the deficiency, may know how to restore the absent principle in all cases where the principle of life is not so far gone as not to have sufficient to build to, or the machine so far decayed as to be beyond restoration. For example; the fœtus, before it comes into existence, is formed by nature with all those little intricacies of machinery that are designed for usefulness in life, viz: the organs of respiration, digestion, the nervous and arterial systems, &c. &c. But in its present state, the mother's breath, food, and beverage, and other support, is that of the child. Its birth changes the scene; the child then acts for itself: it changes a temperature of about 102 degrees of Fahrenheit for one of about 65 to 80. The moment this low temperature strikes the surface, the outward warmth is slacked or reduced; the atmospheric pressure being very near 16 lbs. weight upon the square inch, presses in upon the organs of respiration and the lungs are at once inflated: the temperature being so much greater upon the lungs, (say 102 degrees,) than upon the surface (from 65 to 80,) that the warmth of the lungs immediately rarifies the air to near the temperature of the blood; by which means it becomes so light and expanded that the 16lbs. upon the square inch of the surface pressure will not admit of its continuance longer upon the lungs; and the air, from the buoyancy it has acquired from the warmth, seeks an equilibrium by rising above, in consequence of the heavy external pressure upon the region of the chest upwards, which crowds it out, and with it, the first sound of the voice is a cry. This is the first movement of the machine in producing sound, which, by cultivation, is made to express every passion and want that the body may require: and a judicious practitioner of medicine is its repairer; and to keep it in active operation until it wears out, and in old age every wheel having borne its proportion of labour, it voluntarily falls to pieces.

This frail bark was thrown into life, and he that modelled it, pronounced it perfect: therefore, he does not design that we should take any part away, any more than that we should add to it; as we can do the one in a philosophical point of view, as well as the other. The physician, as the repairer, has no more to do than to remove the clogs and obstructions that retard the motion of the gearing, without removing any part of the machinery; for if you take out any part of this complicated machine it is never as perfect afterwards; and you obstruct, to a certain degree, the whole work, the same as any artificial machine; for instance; a clock or steam engine. The child, if healthy, continues to grow: his arms, legs, body and face are plump and full: we see no indications of old age, such as wrinkles or loss of flesh: he comes up to youth, to manhood, or the meridian of life, which is from 25 to 35 years of age: the members of his body may now be said to have acquired their full vigour. It may now be truly said of the man, as of fruit, he is ripe. He turns the point of life from the zenith and begins to wear or decay. You will hear him remark, I cannot do quite as much as I could once: my food does not appear to afford that substantial support it did once: my rest is deficient: my nerves have become tremulous: wrinkles are fast gathering in my face and hands: my limbs fall away; and why is all this decay? The man does not know: he says, I am growing old; but that does not answer the question. The fact is, the first part that gives away is, the organs of digestion by which the whole fabric is supported; these organs have become first blunted, and are not capable of extracting the same quantity of nourishment from a given quantity of food as before the man had attained the meridian of life, or before the fruit became ripe.

Well, under this state of things, something must be done to keep up vital energy. It will be remembered that while the man was coming to maturity he was laying up in store, strength of blood, size of muscle and bone, and a good store of flesh—the fuel of life. If his appetite should fail, you know the man would not die until all his flesh was nearly gone, and he a mere skeleton; for in proportion as the appetite fails, nature calls upon the stock of flesh already in store, which was laid up in early life to support the body in the decline of life, the same as a man who is ambitious in youth to lay up a sufficient competency for the income to support him; but if the income fails to give him a good and sufficient support, he must make drafts upon the principal, light or heavy, as the circumstances of the case may require.

It is precisely the same with the human system. You will perceive an old gentleman far advanced in life, if he has not injured his constitution in his younger days by taking medicine, or lost any of the vigorous properties of the first stock of his blood, by taking a part of it away or weakening the same by injuring the digestion, through which the blood receives its support, by animal or vegetable poisons, he will run gradually down. As the digestive powers fail, the drafts upon the flesh are more urgent and heavy, and it is not unfrequent that we see the person at the advanced age of seventy, eighty, ninety, and even one hundred years of age, while apparently in his usual health, die sitting in his chair, or in the field, or in the midst of his avocation, the fuel of life having become completely exhausted, or the lamp of life being drained to the very bottom, and the light has become extinct for the want of oil, or nature having completely exhausted from her storehouse the means necessary to sustain life. Such a machine we consider has been under the management of a judicious repairer, engineer, or physician if you please; has been brought to maturity by judicious management; has nurtured a vigorous constitution, and by prudent management has laid aside for future use, a suitable quantity of the material to sustain and prolong life after the person has passed the meridian to its last moments.

Thus you will perceive that the Thomsonians, by understanding the above theory, and practising upon the same principles, are treating the system philosophically. As our theory was formed from our practice, and our remedies are in harmony with life; as they will assist nature in her most depressed situations, or when there is a sufficient spark left to build to, and the remedies will not prove detrimental if given by the practitioner whose judgment has been matured and regulated by a scale established by extensive experience and observations by the bedside of the sick, no other standard can be depended upon.

It may be said, why not let any person, who feels so disposed, try the same kind of experiments as my father did, and run the risk of establishing a theory for himself; to which I reply, has every person, or one in ten millions if you please, the same capacity of mind for inquiry as my father had? if so, is it probable he would have the same chance to bring his unpolished judgment in contact with the regular physician, and have them balanced in the true scale of practical utility? After all, where is the uncultivated mind sufficiently strong to buffet the rough torrent of popular prejudice, and maintain principles directly at war with the long established practices of the day, and work out, as it were, from the rough, a system so philosophical as to be capable of being brought home to the understanding of every mind of moderate capacity, without at once adverting to the old system of practice as a guiding star, as was the case of Samuel Thomson, who proved every principle of his theory by his practice as he progressed, and is ever ready to assign a philosophical reason for every principle advanced.

You now see the Thomsonian system of practice, as patented by my father, used by millions of the inhabitants of these United States, and it must be expected that whenever a system of medicine has been discovered, or any new theory been brought to bear so extensively upon the welfare of community, it will be liable to abuse, and must eventually become subject to legislative regulation. By some, the Thomsonian system of medicine has been made a matter of speculation, by which there has been much complaint by the people. Those who have been the greatest cause of these complaints, were those who have failed in other pursuits in life, such as *mercantile*, *mechanical*, or *commercial*, and casting about for an avocation by which to obtain a sure livelihood with the least trouble and expense, and have adopted the Thomsonian system as the one best calculated to bring about so desirable an object. It is against this class of practitioners the community wish to be protected. Such individuals commence their practice from reading, not having had any previous knowledge practically with the experienced practitioner.

My father's patent-right extends only to the purchaser, and his family right; it does not contemplate that a person who has purchased the right to compound and vend the Thomsonian medicine is also entitled to set himself up as a practitioner, without first obtaining a knowledge of the principles and practice with some person who is well qualified to instruct practically. Now if there is a law compelling the students to comply with the terms of the *New York State Thomsonian Botanic Society* before they shall be able to collect pay by law, it will be a stimulus for the student to prepare himself to be legally allowed to practise. From those persons who have only purchased a family right, the correct practitioner suffers much wrong from the hands of community, who invariably class them together; while the one has an extensive practical knowledge and a good understanding of his theory, the other has only a slight knowledge of the theory by reading only, without any practice.

Secondly. All that is required by the New York State Thomsonian Society is, that those who wish to practise shall not be able to collect pay by law, until they have subscribed to the rules and regulations of the society in every particular.

Thirdly. The state society in general convention shall adopt such course of studies as they shall think proper.

Fourthly. The text books are, Thomson's Guide to Health, Hearsey's Midwifery, Rafinesque's Botany, Thomsonian Recorder, and several other works.

Fifthly. One year to be devoted in study and practice, with a competent practitioner.

Sixthly. You ask what studies are those which the old practitioners pursue which you deem useless?

We deem nearly the whole of the theory and practice of medicine as fallacious, and not to be depended upon; as the medicines are what we consider, and what are generally termed poisons, or articles that are detrimental to health and life. The same articles are used to restore the sick to health that a well person would take to destroy life, if he wished to commit suicide. Now, we can never subscribe to the doctrine that what will kill in the hands of an assassin or suicide, will prove a balm to heal the sick and restore consolation to the afflicted, because the hands are changed that administer the article.

Our medicines are calculated to assist nature and comfort the sick in their affliction, and lift up as it were with a helping hand such as are infirm; to ease pain and quiet the excitability of the system, and bring the body back to the state, as near as possible, of healthy action, and will do no harm if it does no good.

The regular practice makes sick or reduces the patient, and makes him much worse than when first taken; and after it has operated, by a violent effort of nature to throw it off, if the constitution is strong enough to bear the shock of the medicine together with the disease, both will be thrown off together. The medicine is then stopped to give the patient a chance to gain; but if the constitution is not strong enough to throw off the medicine, it is sufficient to take life of itself. We see opium used frequently to take life, also to cure the sick; also mercury for the same purposes. The knife is used to take the lifeblood of animals, to sustain life. The lance is used to save the life of the sick—to restore that same principle that the knife is used to take away.

Under these considerations, we think the materia medica useless to the Thomsonian practitioner, as they take away what we wish to restore. The Thomsonian system of medicine is, thank God, founded on no such system of philosophy."

The committee, it is well known, are not physicians, and of course cannot be expected to combat this theory. They must be pardoned, however, for not giving their assent to a theory, the proof of which could only be obtained by long experience and close 'observation of every variety of disease, and by the performance of the nicest and most scrutinizing anatomical inspections, operations and dissections.

This class of physicians scout anatomy, as to them a useless science; they do not bleed, because the lancet is steel and the assassin's knife is steel, and you must not say they use that tool to cure, which may be used to kill. By a parity of reasoning, a boil, or an abscess, or a bloodblister, must not be opened, because the tool by which the operation is performed is composed of the same material as a deadly weapon. How can the man who has only looked on the surface of a human being, tell what is the cause of disease? What obstruction can he discover?

Is lock-jaw, or tic doloureux, or gout, or rheumatism, or the toothach, occasioned by obstruction? if so, what obstruction? It is an internal obstruction, if obstruction at all; and as dissections are unknown and anatomy useless, the theory must be founded on mere guess work, and according to all philosophic rules, is entitled to no credit.

(*To be concluded in the next number.*)

BIBLIOGRAPHICAL NOTICES.

Transactions of the Medical Society of New York.[1]

This part of the transactions comprises, 1. the conclusion of the statistics of the Medical Colleges of the United States, by Dr. T. Romeyn Beck; 2. the annual address on improvements in medicine, by Dr. Laurens Hull; 3. report of a committee of the society on the subject of medical education; 4. Prize dissertation on diseases of the spinal column, by Dr. Nathan S. Davis; 5. Address before the Chenango county Medical Society, by Dr. Wm. D. Purple; and 6. case of sudden death from rupture of the spermatic veins, by Dr. James McNaughton.

The appendix contains an abstract of the proceedings of the society at its annual session, February, 1840, and a list of officers of the county medical societies.

[1] Transactions of the Medical Society of the state of New York, Vol. iv., Part 3. 8vo. pp. 190. Albany, 1840.

Philadelphia Hospital.

(Concluded from page 59.)

Summary of Cases treated in the Women's Hospital, Blockley, from January 1st, 1839, to January 1st, 1840.

WOMEN'S MEDICAL WARDS.

Diagnosis.	Under 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	80 to 90	Cured.	Relieved.	Disch'd.	Died.	Rem'ng.
Amenorrhœa,	0	1	2	0	0	0	0	0	3	0	3	0	0
Apoplexy,	0	0	0	0	0	0	0	0	0	0	0	0	0
Ascites,	0	2	3	4	1	1	0	0	0	4	4	6	2
Asthma,	0	0	1	1	1	1	0	0	0	2	2	0	2
Anæmia,	0	1	0	0	0	0	0	0	1	0	1	0	0
Arachnitis,	0	0	1	1	0	0	0	0	1	0	1	0	1
Bronchitis,	0	3	4	2	1	0	0	0	7	0	7	0	3
Constipation,	0	2	1	2	2	0	0	0	7	0	7	0	0
Carditis,	0	0	1	0	1	0	0	0	1	0	1	0	1
Catarrh,	0	1	1	0	1	0	0	0	2	0	2	0	1
Carcinoma Uteri,	0	0	1	0	0	0	0	0	1	0	1	0	0
Chorea,	1	0	0	0	0	0	0	0	1	0	1	0	0
Cholera Morbus,	0	1	1	1	0	1	0	0	4	0	4	0	0
Dothinenteritis,	0	1	1	0	0	0	0	0	1	0	1	0	1
Dyspepsia,	0	3	2	1	0	0	0	0	5	0	5	0	1
Dysmenorrhœa,	1	0	1	1	0	0	0	0	2	0	2	0	1
Dysentery,	0	2	4	3	2	1	2	1	10	0	10	3	2
Diarrhœa,	0	5	5	5	2	1	0	0	12	0	12	6	0
Epilepsy,	0	0	2	0	0	0	0	0	0	1	1	0	1
Fever, Intermittent,	0	6	13	4	3	4	0	0	25	2	27	0	3
" Remittent,	0	1	2	1	2	1	0	0	5	0	5	0	2
" Typhus,	0	2	3	3	1	0	0	0	3	0	3	5	1
Gastritis,	2	3	3	1	2	0	0	0	5	3	8	0	3
Gangrene of Lungs,	0	1	1	0	0	0	0	0	0	0	0	1	1
Hypertrophy of Heart,	1	0	2	1	1	0	0	0	0	2	2	1	2
Hysteria,	0	0	0	1	0	1	0	0	1	0	1	0	1
Hæmatemesis,	0	0	1	0	0	0	0	0	1	0	1	0	0
Hemiplegia,	0	0	1	0	0	0	0	0	0	1	1	0	0
Hæmoptysis,	0	0	1	0	0	0	0	0	1	0	1	0	0
Hyperæsthesia.	0	0	1	0	0	0	0	0	0	1	1	0	0
Jaundice,	0	1	1	0	0	0	0	0	0	0	0	1	0
Laryngitis,	0	1	2	0	1	0	0	0	2	0	2	0	2
Leucorrhœa,	0	1	1	0	0	0	0	0	2	0	2	0	0
Menorrhagia,	0	0	1	1	1	0	0	0	1	0	1	0	2
Meningitis,	0	2	0	0	0	0	0	0	2	0	2	0	0
Nephritis,	0	1	1	0	0	0	0	0	0	0	0	0	2
Neuralgia,	0	5	2	3	2	3	0	0	13	0	13	0	2
Oligæmia,	1	0	1	0	0	0	0	0	1	0	1	1	0
Puerperal Hysteria,	1	0	0	0	0	0	0	0	1	0	1	0	0
Pericarditis,	0	0	0	1	1	1	0	0	1	0	1	0	2
Pneumonia,	0	1	2	3	2	0	0	0	5	0	5	0	3
Pleuritis,	0	5	3	2	1	2	0	0	10	0	10	0	2
Phthisis Pulmonalis,	3	10	14	8	5	1	1	0	0	15	15	21	6
Paraplegia,	0	0	1	1	1	0	0	0	1	0	1	2	0
Paralysis,	0	2	1	0	0	0	0	0	0	2	2	1	0
Purpura,	0	0	1	0	0	0	0	0	0	1	1	0	0
Procidentia Uteri,	0	1	0	0	0	0	0	0	1	0	1	0	0
Rheumatism,	0	6	10	18	5	2	2	0	31	3	34	0	10
Ramollissement du Cerveau,	0	0	0	0	0	0	1	0	0	0	0	1	2
									170	37	207	49	60

WOMEN'S SURGICAL WARDS.

	Under 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	Cured.	Relieved.	Disch'd.	Died.	Rem'ng.
Amputation, ...	0	1	1	0	0	0	2	0	2	0	0
Abscess, ...	0	1	2	2	0	0	3	2	5	0	0
Amaurosis, ...	0	0	1	1	1	0	1	1	2	0	1
Anthrax, ...	1	0	0	0	0	0	0	1	1	0	0
Bubo, ...	1	1	2	1	0	0	3	0	3	0	2
Burns, ...	1	6	5	1	0	0	7	0	7	0	6
Cataract, ...	0	0	1	2	1	1	1	4	5	0	0
Chancre, ...	5	3	2	2	0	0	9	0	9	0	3
Caries of Bone, ...	0	1	2	1	1	0	0	2	2	1	2
Contusions, ...	1	6	6	4	3	0	17	0	17	0	3
Cancer of Rectum, . .	0	1	0	1	0	0	0	1	1	0	1
Carbuncle, ...	0	0	0	0	1	0	0	1	1	0	0
Coxalgia, ...	0	1	0	1	0	0	0	1	1	0	1
Condylomata, ...	0	0	0	0	0	0	0	0	0	0	0
Conjunctivitis, ...	0	0	2	2	1	0	3	0	3	0	2
Concussion of Spine, . .	1	0	1	0	0	0	2	0	2	0	0
Dislocations, . . .	1	1	1	0	0	0	0	2	2	0	1
Disease of Spine, . . .	0	1	1	0	0	0	0	2	2	0	0
Erysipelas, ...	0	1	1	1	0	0	3	0	3	0	0
Fungus Hæmatodes, . .	0	0	0	0	1	0	0	1	1	0	0
Fistula in Ano, ...	0	0	1	0	0	0	0	1	1	0	0
Fractures, ...	0	2	3	1	0	0	4	0	4	0	2
Fracture of Spine, . .	1	1	1	0	0	0	0	1	1	2	0
" Clavicle, . .	0	2	1	0	0	0	2	1	3	0	0
Gangrene of Leg, . .	0	0	1	0	0	0	0	0	0	1	0
Gonorrhœa, ...	17	18	14	2	0	0	43	0	43	0	8
Hypopyon, ...	0	0	1	0	0	0	0	1	1	0	0
Hernia, ...	0	0	0	1	1	0	0	2	2	0	0
Hemorrhoids, ...	0	1	1	2	0	0	3	0	3	0	1
Indurated Labia, . . .	0	1	0	1	0	0	0	1	1	0	1
Iritis, ...	0	0	2	2	0	0	3	0	3	0	1
Inflammation of Knee, .	0	0	1	0	0	0	1	0	1	0	0
Incised wounds, . . .	1	2	2	1	0	0	4	0	4	0	2
Lacerated wounds, . .	0	2	1	2	1	0	5	0	5	0	1
Lumbago, ...	0	1	1	0	1	0	3	0	3	0	0
Nebula Oculorum, . . .	0	0	0	1	0	0	1	0	1	0	0
Neuralgia, ...	0	1	1	1	1	0	3	0	3	0	1
Ophthalmia, ...	0	0	2	0	0	0	1	1	2	0	0
Opacity of Cornea, . .	0	0	1	0	1	0	0	2	2	0	0
Pernio, ...	0	1	0	1	0	0	0	2	2	0	0
Psora, ...	1	2	0	0	0	0	2	0	2	1	0
Prolapsus Uteri, . . .	0	1	1	1	0	0	0	2	2	0	1
Poisoning of Arm, . .	0	1	0	1	0	0	2	0	2	0	0
Retention of Urine, . .	0	0	1	2	0	0	2	0	2	0	1
Recto-Vaginal Fistula, .	1	0	1	0	0	0	0	1	1	0	1
Scrofulosis, ...	1	1	4	2	0	0	0	5	6	1	1
Sprains, ...	1	3	5	1	0	0	9	0	9	0	1
Syphilis, Hereditary, . .	2	0	0	0	0	0	0	1	1	0	1
" Primary, . .	5	10	5	2	4	0	23	0	23	0	3
" Secondary, . .	6	17	2	5	2	0	25	7	32	6	4
Syhilitic Iritis, . . .	0	2	0	0	0	0	2	0	2	0	0
" Rheumatism, .	0	3	0	2	0	0	5	0	5	0	0
" Ulcers, . .	1	6	5	0	0	0	9	0	9	0	3
" " of Leg, .	1	12	4	2	1	0	17	1	18	0	2
Ulcer of Cornea, . .	0	0	1	1	0	0	0	2	2	0	0
Vesico-Vaginal Fistula, .	0	1	0	0	0	0	0	0	0	0	1
							220	49	269	12	58

Total number for the year admitted in Women's Medical Wards, 316. Of the above 46 were coloured.

Married, 214; Single, 102.

Intemperate, 213; Moderate, 70; Temperate, 33.

Total number for the year admitted to Women's Surgical Wards, 339. Of the above 48 were coloured.

Married, 136; Single, 203.

Intemperate, 215; Moderate, 71; Temperate, 53.

Summary of Cases treated in the Men's and Women's Lunatic Asylum, Blockley, from January 1st, 1839, to January 1st, 1840.

	MEN'S LUNATIC ASYLUM.											WOMEN'S LUNATIC ASYLUM.										
Diagnosis.	Under 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	Cured.	Relieved.	Disch'd.	Died.	Rem'ng.	Under 20	20 to 30	30 to 40	40 to 50	50 to 60	70 to 80	Cured.	Relieved.	Disch'd.	Died.	Rem'ng.
Arachnitis, ...	0	0	0	2	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Apoplexia, ...	0	0	0	2	1	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Acute Meningitis, . .	0	0	1	2	0	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0
Chronic Meningitis, . .	0	0	1	2	2	0	0	3	3	1	1	0	1	0	1	0	0	1	0	1	1	0
Compression of Brain, .	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Cerebritis, ...	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Dementia, ...	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	1	0
Delirium Tremens, 1st stage,	0	25	26	25	11	4	90	0	90	0	1	1	13	16	8	1	1	40	0	40	0	0
" " 2nd "	2	20	21	21	9	3	76	0	76	0	2	3	3	4	1	1	0	12	0	12	0	0
" " 3rd "	0	5	10	8	7	1	25	0	25	6	0	0	5	5	4	1	0	13	0	13	2	0
Epilepsy, ...	0	1	1	1	1	0	0	2	2	0	2	0	0	1	0	0	0	0	0	0	0	1
Hysteria, ...	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	1
Intoxication, . . .	3	10	18	12	3	2	48	0	48	0	0	2	6	5	1	1	0	12	0	12	0	3
Idiocy, ...	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Insanity, Acute, . .	0	5	8	6	5	2	15	5	20	3	3	2	7	2	0	0	0	7	4	11	0	0
" Chronic, . .	0	2	2	1	0	0	1	3	4	0	2	0	10	12	3	2	0	6	12	18	0	9
" Moral, . . .	0	0	1	1	0	0	1	0	1	0	1	0	5	3	0	0	0	2	4	6	0	2
" Periodical, . .	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
" Hereditary, . .	0	0	0	1	1	0	0	1	1	0	1	0	1	1	0	0	0	0	2	2	0	0
Monomania, . . .	0	1	2	2	1	0	0	3	3	0	3	0	0	0	0	0	0	0	0	0	0	0
Melancholia, . . .	0	1	0	3	2	1	1	4	5	0	2	0	1	2	1	0	0	0	3	3	0	1
							260	23	283	14	19							92	28	120	6	17

MISCELLANEOUS NOTICES.

Medical College of Philadelphia.—In conformity with provisions of the charter of Incorporation of the Medical College of Philadelphia, the following officers have been duly elected:—

President.—Thomas H. Hewson, M. D.
Vice Presidents.—Thomas Harris, M. D., Charles D. Meigs, M. D.
Treasurer.—Henry Bond, M. D.
Corresponding Secretary.—John Bell, M. D.
Curator.—Joseph Brookfield, M. D.
Recording Secretary.—Joseph Warrington, M. D.
Board of Examiners.—*For one year.*—Jacob Randolph, M. D., Charles D. Meigs, M. D.
For two years.—D. F. Condie, M. D., Robt. Bridges, M. D.
For three years.—Reynell Coates, M. D., Caspar W. Pennock, M. D.

Poisoning with Colchicum.—A Quack Aurist.[1]—The following case is interesting in a twofold manner; it affords an example of poisoning by colchicum, and illustrates the recklessness with which quack pretenders to medicine sacrifice human life to their selfish ends:—

A wine merchant, 50 years of age, of strong constitution, had been long subject to deafness. By chance the prospectus of a quack aurist was placed in his hands, in which prospectus a prompt and certain cure of his infirmity was promised. He immediately repaired to the aurist's, who prescribed a potion containing colchicum, and some other, but less active, drugs.

M—— took of the potion, as he had been directed, a spoonful every half hour, and soon felt its effects; the suffering produced was extreme, but the aurist, when informed, said that it would soon pass away. Under this assurance, the unfortunate man continued to drink the potion, to the last drop, and then fell into the most alarming state. A physician was now consulted, but before any remedy could be administered, the man was dead. He had taken, in three days, more than half an ounce of colchicum root.

The living Skeleton.[2]—From a notice of the sittings of the Royal Society of Medicine, of Bordeaux, published in Froriep's Notizen, October, 1839, it appears that the man, Ambrose Claude Saurat, who, some of our readers may remember, was exhibited in this country about 15 years since, is still a living skeleton. He has lately been carefully examined by the Royal Society at Bordeaux. From their description of him it appears, that except in a partial loss of the use of his extremities, his condition has not materially changed. He can still breathe freely, and has no particular pain about the chest. He digests well, and never has diarrhœa, though he is sometimes constipated. His appetite is tolerably good, but he eats little, and adopts a very regular regimen. He prefers the flesh of young animals, and avoids pickled meat, wine, and spirits. His daily consumption of food is only 12 ounces.

Saurat's intellectual faculties are still good: but his memory has decreased for many years. His sexual appetite is still undeveloped, and he has never had any intercourse with women. He enjoys quietude, and has no cares or mental suffering. He often has singular dreams; in which he hears music, and thinks he is actively exerting himself. He sweats profusely at night, and especially after drinking cold lemonade. He cannot bear a dull heavy atmosphere; but the climate of Italy exactly suited him.

The deformity of his hands and feet (and he can now neither walk nor stand), was preceded by dragging pains in his extremities, which commenced 10 or 12 years ago. The power of moving them was gradually lost; but he had no pain in the head or back, nor any remarkable pain in the abdomen.

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[1] Journal de Chimie, December, 1839, and London Lancet, April 4, 1840, p. 62.
[2] Lond. Med. Gaz., April 24, 1840, p. 207.

After Saurat had been examined, and had given the account of himself, from which the above is abstracted, in a very clear manner, his abnormal condition was more accurately inquired into.

His head is a little turned towards the right side: his eyes have a quiet dull expression; his complexion is pale and fixed; the left side of the face is thinner than the right; the mouth is large, and the right corner of it is remarkably drawn downwards.

His chest has a deep depression on the median line; the ribs, and especially those on the left side, are very much curved; the antero-posterior diameter of the chest is about 4 inches; the spine is very much curved to the left side, but the curvature alters according to the mode in which the trunk is supported. Percussion detects a fuller sound on the right than on the left side; and there is a slight dulness on the left side behind. With the stethoscope, the respiratory murmur can scarcely be heard on the anterior and right side of the chest; but on the left one hears even with the unassisted ear a distinct rubbing sound. The respiration is chiefly effected by the abdominal muscles, for the ribs scarcely move. He inspires 24 times in the minute; his radial artery beats from 80 to 84 times in the same period.

His abdomen presents nothing peculiar; it is yielding and tolerably normal in its developement and form.

In the genital organs, nothing marked is to be observed.

The extremities are incredibly emaciated, especially the hips, thighs, shoulders, and upper arms. His hands and feet are curved and swollen; the fingers are hook-like and almost immovable.

Saurat has got together a respectable property, and has a small estate in the district of Mans, where he takes care to pass the winter.

NECROLOGY.

Mr. Copland Hutchison.—This gentleman, who had furnished many valuable contributions to surgical science, died recently at Plymouth, England. He was the author of a letter on the operation for popliteal aneurism, London, 1811. Practical observations in Surgery, London, 1816. Practical cases in Surgery; particularly as regards the naval and military service, London, 1826; and also of various communications in the Medico-chirurgical Transactions.

BOOKS RECEIVED.

From the Author.—Notice of the Daguerreotype. By William E. A. Aikin, M. D., Professor of Chemistry and Pharmacy in the University of Maryland. 8vo. pp. 16. Six wood engravings (from Maryland Med. and Surg. Journal, Vol. i. No. 2.) Baltimore, 1840.

From the Author.—Philosophy of Mind, developing new sources of ideas, designating their distinctive classes, and simplifying the faculties and operations of the whole mind. By John Stearns, M. D., of the city of New York. 8vo. pp. 25. New York, 1840.

THE

AMERICAN MEDICAL INTELLIGENCER.

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Art. I.—REPORT OF THE MINORITY OF THE SELECT COMMITTEE OF THE ASSEMBLY OF THE STATE OF NEW YORK, ON THOMSONIANISM.

(*Concluded from page* 75.)

Another of the leading principles of this class of physicians is, that the human body is composed of four elements, earth, air, fire and water. Now, as this class of physicians never dissect a human body, and are not chemists, how can they inform us of its component parts? If we wish to ascertain the component parts of any material thing, we submit it to the chemist; we analyze it, resolve it into its elementary principles. This theory was not arrived at in any such way; but to use the words of the founder of this system, he arrived at it by the "mature consideration."

Methinks, that if the qualities of a newly discovered ore were to be ascertained, its elements discovered and its value made known, the process would be something besides consideration. Were consideration the test of component parts and value, there would probably be as many opinions as men.

In this very instance, unfortunately for the theory, and the "mature consideration" on which it is founded, the very things called elements are falsely so called; earth, air, fire, or water, are not elements. The heat produced by combustion, may perhaps be denominated an element, but who does not know that earth, air, and water are compounds? who is it that presumes to speak of elements and of compounds, unless a chemist himself, or adopting the opinions of chemists.

It will not be denied, that it is the duty of government to protect, by laws aptly fitted to the case, the people against the impositions which any trade, craft, occupation or profession may practise upon them. Custom or statute, or both, have established certain rates or toll for the miller. We test, by certain standards, the weights and measures which are in use; we establish the weight of a given measure of grain; we exact a license from the pedlar, auctioneer, and dealer in liquors; we establish an inspection over the productions of the butcher, the fisherman, the tanner, the lumberman, and the miller, to protect community against imposition, interposing the skill of the inspector as a shield for the ignorant. This we do in the arts.

In the sciences we have laws for the protection of the people against pettifogging. In the ecclesiastical world, the state, out of regard for perfect religious freedom and perfect toleration in all matters of faith, abstains from intermeddling; but even here, the different societies of Christians, one and all, have their laws, as certain and as effectual too, as to the moral and literary qualifications of their spiritual guides. In medicine, too, the law has prescribed the moral character, the term of study, the examination and the age of the practitioner.

Are all these laws founded in folly? Are they deserving of being stigmatized as monopolies; as interfering tyrannically and unnecessarily with common rights and constitutional privileges?

In whose behalf is it that we are called on to deviate from a course practised and sanctioned by the wisdom of ages? Who are they, who talk so much of inherent rights and constitutional privileges, and of monopoly, and of the ignorance and unskilfulness of others? They are men who claim to practise under a *patent*, who have the exclusive right to compound, vend and administer certain medicines; their existence is predicated on monopoly and exclusive chartered privileges.

Who are they who stigmatize others with the mystery thrown around their science; of their learned technical terms; terms known and understood alone by the medical world; and from their uniformity, affording a wonderful facility for the dissemination of learning, terms, of necessity, learned but always descriptive, and founded on a common language? Terms which any man may learn and understand, if he will just take the trouble to open the dictionary, and no patent lock interposed. They are men who practise under a patent, granting exclusive privileges; and who give the names of No. 1 and 2, as words to their medicines. Are numbers, digits, Arabic figures, more descriptive of the nature, power and properties of medicines, than the most abstruse word used in materia medica?

"Physician heal thyself," was never more appropriately applied, than in this case. Render simple and plain your own vocabulary; call your medicines by plain English names, and then criticise, ad libitum, the mystery or pedantry of others.

The committee, with the view of discovering whether there was any thing real in the objection to the use of mineral medicines; whether the principle laid down by this class of physicians, that all metals and minerals, in their state of purity, and all compounds of them, whether natural or artificial, were poisonous, took some pains to ascertain into what substances metals and minerals entered and formed an essential component part, and found that there was scarcely an article of food or medicine but was composed in part of a metal or mineral. That the healthiest human being is composed, in part, of metallic and mineral substances. The colour of the blood is occasioned by a compound of iron it contains; the bones are a mineral substance, and these component parts are as necessary as any other which enter into the system.

Salt itself, so necessary to the enjoyment of life and the promotion of health, is a mineral, and has for its base a metal; one of these *poisonous* metals. The body of man being composed in part of both metals and minerals, it would seem that a constant supply of these materials in some form was necessary to the developement, and sustenance, and health of the animal system. The committee cannot come to the conclusion that metals or minerals, or their compounds are, as a general rule, poisonous: on the contrary, that both in sickness and in health, they are necessary to our existence.

The fancy, that because the metallic and mineral kingdom is in the ground, and the dead body of a man is deposited in the ground, and that the former has an affinity for the latter, and therefore has a tendency to drag down the body to the grave, is hardly worthy of comment. Water lies as deep in the ground as the metal; its tendency is as essentially downwards. Rum has no such downward tendency. Rum does not exist in the ground; the tendency of rum is upwards. If the theory were correct, the conclusion would seem to follow that water is poisonous and rum is healthy.

This class of physicians use roots, and their tendency is downwards. The committee have also taken some pains to examine the vegetables which this class of physicians use, and behold, there is not one but is composed, in part, both of metals and minerals. This is true of the whole animal and vegetable kingdom. Out of a great number of analytical experiments performed by Sir Humphrey Davy, the committee take leave to select the following: 100 parts [of the ashes] of wheat flour contain 43 parts of soluble salts, 13 of phosphates and carbonates, ½ a part of metal, 32 parts of silica; so that [the ashes of] the material out of which our daily bread, the "staff of life" is made, is composed .98½ of these poisonous metals and minerals which have such a tendency to drag down men to the grave.

The [ashes of] Indian corn, the native grain, and of which above all others, the American is proud, and of which the poet Barlow said, that half the bones of New-England's sons are made, is composed of .78 of metallic and mineral substances.

It would be a waste of time, to show the component parts of different vegetables. It is sufficient to say, that there is not a single vegetable in the world of plants which is not composed, in part, of metallic and mineral substances. Even the red pepper, which is the great stimulant used by this order of physicians, is found on analysis, to contain ten per cent. of metallic matter. The lobelia inflata is not more fortunate. This plant, vulgarly called Indian tobacco, and which occupies so high a rank in the materia medica of this class of physics, is thus described by Barton. It will be borne in mind, that Barton's Medical Botany is one of the few books which this class of physicians claim that it is useful to read. "Lobelia inflata," says Barton, "is decidedly one of the most active of our native vegetables. It might, perhaps, be said with truth, that the United States does not yield a plant of more powerful and unequivocal operation on the human system; and since poisons are, generally, under judicious use, good medicines, the Indian tobacco seems to have an undoubted claim to a place in the materia medica; it is possessed of an emetic, sudorific and powerful expectorant effect. Not only horses and cattle have been supposed to be killed by eating it, but a remarkable instance of its deleterious effects on the human system is related in the report of a trial for murder, of a notorious empiric, in Massachusetts, who caused lobelia to be used to a pernicious extent as a nostrum. This daring and ignorant man (Samuel Thomson, by name,) is said to have usually prescribed it, and frequently with impunity, in the dose of a common teaspoonful of the powdered seeds or leaves, and often repeated. If the medicine does not puke or evacuate powerfully, it frequently destroys the patient, and sometimes in five or six hours."

How this author, who calls lobelia a poison, and the founder of this system of medicine a notorious empiric, and a daring and ignorant quack, *should* have found favour with his son, the president of the N. Y. S. M. T. B. S. who has so high a regard for his father as to think his equal is not to be found amongst 10,000,000 of men, seems inconsistent with a knowledge of the author. The committee have come to the conclusion that Barton's Medical Botany might, perhaps, have been read, as bills are in this house, by its title only.

The committee, with the view of showing that the sciences of anatomy, physiology, and chemistry, were useful to be studied by the practitioner of medicine, take leave to express an opinion, that disease consists in a change, either of structure or function, in the human system, and that the object of the physician is to bring the system back to its original healthy condition. Now anatomy teaches that the body consists of a great variety of tissues, and that the progress of disease in each is different. This is proved by an examination and comparison of symptoms, and it is the union of a certain number of symptoms which constitutes a particular disease.

It has been ascertained by long practice and experience, that certain medicines or remedies have removed such disease. If such medicines occasionally prove ineffectual, an examination of the dead body will show that such disease had advanced too far before the application of the remedy to be arrested by it.

A moment's reflection will satisfy all that the progress of medical knowledge, the science of treating disease with skill, must, of necessity, be slow, and owing to the complex nature of the human body, to a certain extent, imperfect.

But if any truth has been established by the experience of ages, it would seem to be this, that there is a variety of disease, and that it cannot be successfully treated by a single class of medicines. A necessary inference from this is, that the physician needs all the light which can be derived from the study of the human system, when in a state of health. Taking this view of the subject, the committee come to the conclusion that an intimate knowledge of anatomy and physiology is absolutely necessary to the physician.

Chemistry teaches the nature and properties of all material bodies; of course of the nature of all medicines. Can it be doubted then that this science which teaches the nature, and the power of medicine is useful and necessary to a physician. As well might the mechanic doubt the utility of understanding the power and use of the tools of his trade, as the physician doubt the necessity of knowing the component parts, the nature and strength of the medicines he uses.

Had this class of physicians been chemists, they would not have levelled their sweeping denunciation on all metals and minerals, and compounds thereof, for that science would have taught them that every medicine which is prescribed by them contains both these substances.

One of the greatest discoveries which crowned the labour and research and learning of the medical world, is the discovery of the theory of the circulation of the blood, by Harvey. This great man, after going through the preparatory studies at the grammar school, studied five years in the University of Cambridge. As a traveller he performed the tour of Europe, and desirous of accomplishing himself as a physician, he pursued his studies some years in the medical school of Padua, then one of the most celebrated in Europe, and there he took his degree as Doctor of Medicine, in 1602. He afterwards became a fellow of the College of Physicians in London, and a professor of anatomy and surgery in that college, and in 1616 first disclosed his great discovery of the theory of the circulation of the blood. Harvey was at that time 38 years of age, and his whole life had been devoted to the cause of science, and the greater part of it to that particular science in which his great discovery was made.

Jenner, that great benefactor of mankind, who disarmed a disease more deadly than the plague of all its terrors, was the son of an English clergyman, received a most excellent classical education, and studied medicine the usual length of time with a country practitioner; not content with the education thus obtained, better probably than that usually allowed, he went to London to attend the hospitals there, and became a private pupil for two years of the celebrated John Hunter, a name dear to every medical student. He cultivated natural history with great ardour and success, and was, in the opinion of Hunter, the first scholar in Europe in the science of human and comparative anatomy.

The tendency of this last science was the discovery, which immortalized his name, and which has saved, and which will continue to save, to youth its beauty, and has prolonged, and will continue to prolong the lives of millions. This great discovery engaged the attention of Jenner for more than twenty years; and an acquaintance with his experiments would convince all that the occasional failure of vaccination was owing to a neglect of the rules which he prescribed.

The names and short biographical sketches of these great men are introduced merely to authorize the inquiry, whether these discoveries ever would have been made, by and with the aid of such an education as the Thomsonian physicians think is all sufficient. Science is always progressive, and it requires very little of the virtue of humility to say and believe that it is yet in its infancy. Sir Isaac Newton, the great, the intellectual, the almost pure intelligence, the connecting link between men and angels, if such a thought may be indulged, said, when speaking of his great learning, his wonderful discoveries, that he considered himself but a child, amusing himself by picking up shells on the shore of the great ocean of science.

This is a world of humbugs; and with all our keen-sightedness, adroitness, skill and ingenuity in all we undertake, we are, perhaps, the most easily humbuged of any nation in the world, and in nothing is this alacrity to be deceived more fully manifested than in the eternal, never ending, still beginning, doctoring still and still destroying patent medicines: perhaps one-fourth of the advertising patronage of a country newspaper consists in puffing patent medicines, and this great tariff is levied on credulity afflicted with disease. If there were truth in the advertisements of a single paper, attested to by the learned, the wise and the pious, there is not a disease to which poor humanity is heir, but what is susceptible of speedy relief and ultimate cure. It is the duty of a wise government to study the character and propensities of the people for whom it makes laws; and if it is forced so to shape the law as to correct fallacy and vice. Whether the legislature of this state, when it gave to a German quack $1,000 to disclose a pretended specific for the bite of a mad dog, was guided by that wisdom which checks imprudence, restrains credulity in its race of folly; or whether it gave countenance to our innate gullibility and love of the marvellous, the committee do not pretend to decide. One of the prominent weaknesses of man is the love of the marvellous. When, superadded to this, the fear of death operates upon a mind, enfeebled by disease, and upon the minds of friends full of apprehension and anxiety, we are apt to repose confidence in worthless objects; and to use the most ridiculous and hazardous means which ignorance may prescribe or impudence administer. The Leyden phial, the touch of the king or the seventh daughter for scrofula, the patent tractors, the philosopher's stone and animal magnetism, have each in their turn occupied the attention and preyed upon the powers and credulity of mankind; and one folly seems to give way only to make room for another; and the committee are of opinion that no legislation should be indulged, which is calculated to encourage the love of the marvellous, to encourage credulity, or to countenance those who practise upon these infirmities in our nature.

The committee are of opinion that the very foundation of all this theory which is sought to be upheld by law, is founded in ignorance and error; and that it would only set at nought most of those lights which are necessary to guide the physician in the intricate path which he is obliged to travel.

That to say that a man ignorant of anatomy, of physiology, of pathology, of chemistry, of materia medica, may be safely trusted to administer to the human system, which is so fearfully and wonderfully made, would be saying more than to say, that he who never saw the inside of a watch, was fit to repair the most valuable timepiece.

That to give legislative countenance in such case would be to encourage gullibility and credulity; to advocate the cause of quackery in the case of medical science; to set at nought all those rules of plain common sense, which in other matters usually govern mankind.

Art. II.—CASE OF FUNGUS HÆMATODES.

BY DAVID HUTCHISON, M. D.

Pleasant View, Shelby county, Ia., May 7th, 1840.

Dear Sir,—Being a subscriber, and a constant reader of your valuable periodical, I take the liberty of sending you the following case: should you deem it worthy of a place in the Intelligencer, you will confer a favour, by inserting, with it, your opinion, whether it was or was not fungus hæmatodes, and if not, what it was? As I can find nothing of a precisely similar nature described in any of the books.

Yours respectfully,

DAVID HUTCHISON.

Robley Dunglison, M. D.

W. H. ætat. 48, of the scrofulous diathesis, consulted me about two years ago, respecting a tumour situated on the left side of the thorax at the junction of the third and fourth ribs with their cartilages. He stated that he had always enjoyed a reasonable share of good health, and that he first discovered the commencement of the tumour nearly six years previously, and according to his own description, a portion of the skin, about the size of a twelve and a half cent piece, became of a purple florid colour, without either pain or soreness, and continued in this state two years, when he perceived the part enlarging gradually, so that in the space of two years more, it attained the size of a hickory nut. It was hard to the touch, without pain or soreness, the skin covering it was of a purple colour. He solicited me to remove it with the scalpel, which I accordingly did, and healed the wound by the first intention. The tumour when removed appeared to be very vascular, and when pressed between the fingers, there exuded a fatty substance. His health remained good, but in a few months the tumour was reproduced, precisely in the same place and of the same appearance. He now submitted to the advice of a female empiric, and had it removed by caustics. In a few months it was again reproduced in the same place, and continued to enlarge, until January, 1840. His general health having become very much impaired, he called me to visit him January 4th. He had a sallow cadaveric appearance; pulse rather quick, but compressible, tongue moist, but a yellowish coat on the dorsum, pain and stiffness in the loins. The tumour was somewhat larger than a hickory nut, the skin over it was of a dark purple colour, hard to the touch, no soreness, and little fibrous branches could be felt diverging from it under the adjacent skin, and below the axilla of the left side, in a space the size of a man's hand; there were thirteen tumours (of the same appearance) varying from the size of a garden bean, to that of a hickory nut. In the axilla of the same side, there was a tumour the size of a hen's egg, and there bulged out from the surface of it a soft spongy substance about the size of a marble; immediately under this tumour, one of the axillary glands was enlarged to the size of a walnut, which produced pressure on the axillary vessels, and caused tumefaction of the extremity of the affected side, and the whole left side of the thorax was in patches of a florid, purple colour, and under the discoloured spots tumours could be felt varying from the size of small shot to that of garden peas, also some small tumours had appeared on the shoulder and arm of the affected side, and the whole of the side was somewhat œdematous.

I prescribed hydrarg. mass. 6 grs. every other evening, to correct the hepatic secretion. Frictions with the vol. linim. to the loins, as there was no tenderness over any of the spinous processes, and the tumours to be brushed over with tinct. iodini of the usual strength night and morning, and gave him twenty drops of tinct. iodini twice a day.

I visited him once a week to watch the effects of the iodine on the tumours; they appeared to subside very considerably for a time, but his health was declining so rapidly, that interference with the local disease appeared unnecessary; emaciation proceeded rapidly, respiration was performed entirely by the right lobes of the lungs, and his appetite had almost gone, so that tonics and stimulants appeared to be all that was necessary to sustain the animal powers as long as possible. He continued to sink gradually, and died on the 28th February, being comatose 36 hours before death. There exuded from the tumour in the axilla a sanious fluid of an offensive fetor a few days before his death.

The bowels were easily regulated during the whole of his confinement, and the various secretions were but slightly deranged.

Post mortem examination not permitted.

If I have given a sufficiently accurate history of the case for you to form an opinion of the disease, I should like to see it in your next number.

Yours, &c. DAVID HUTCHISON, M. D.

To Dr. Dunglison.

ART. III.—CASES ILLUSTRATING THE EFFICACY OF DIVIDING THE INTERNAL RECTUS MUSCLE, FOR THE CURE OF SQUINTING.

BY P. BENNETT LUCAS, ESQ.[1]

CASE I.—April 7, 1840.—Catherine Culbert, aged 60, has had strabismus from the time she was three years old. The right eye is turned deeply towards the inner canthus, so that the outer segment of the circumference of the cornea looks forward. There are two specks of long standing on the cornea.

When the left eye is covered the turned-in one slightly alters its direction, and by an effort the patient can direct it outwards in a sufficient degree to bring into view the entire of the cornea, and a very small portion of the conjunctiva, between it and the inner canthus. She cannot, however, retain the eye longer in this position than a few seconds.

Notwithstanding the very unfavourable condition of the eye of this patient for an operation, the difficulties which offered themselves in reaching the muscle at fault for the purpose of its division, and after its division the question which naturally presented itself, whether an eye for fifty-seven years thus deformed would resume the normal condition it had enjoyed but for three years, I proceeded to the operation, assisted by Dr. Hingeston and Mr. Wardrop, jun. A bandage was placed over the sound eye, so as to exclude the light. The upper eyelid was secured with a speculum, and the lower was depressed with the fingers. By these means the globe of the eye was also sufficiently fixed. Desiring the patient to direct her eye as much outwards as possible, I grasped the small portion of conjunctiva at the inner canthus, which was brought into view, with the square forceps, and divided this membrane from below upwards by means of a small knife, to the extent of about five lines. A partial chemosis almost immediately took place, from the effusion of blood and tears beneath the lips of the incision, which gave them a swollen appearance, and which more or less interfered with the future steps of the operation. I next inserted a double hook into the sclerotic coat, and found so much difficulty in everting the globe of the eye in a sufficient degree to expose the insertion of the internal rectus muscle, that, at the suggestion of Dr. Hingeston, I bent a small common probe (about four lines of the instrument) at an acute angle, and introducing it into the incision of the conjunctiva, I readily passed it underneath the muscle, and fitting it close between its insertion and the sclerotic coat, it was drawn with much ease towards the incision of the conjunctiva, and divided with a bent scissors. This manœuvre with the bent probe answered the purpose of bringing the muscle and globe of the eye so completely under my command that I determined, in the next case which presented itself, to adopt a similar proceeding.

The result of this case was unsatisfactory; it is now the 23rd of April, and no decided improvement has been effected in the strabismus. It is a case, however, which is highly instructive, and fraught with the most satisfactory inferences in regard to the safety of the operation, and the new method of performing it. The woman was aged 60, and had the deformity fifty-seven years; under the most favourable circumstances she could but turn the eye slightly outwards, and it was therefore hardly to be expected that the operation would have been attended with the same happy effects which have followed the other cases in which I have operated.

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[1] London Lancet, May 2, 1840, p. 188.

This case proves the safely with which the operation can be performed under circumstances the most unfavourable; the globe of the eye was not only turned deeply inwards, but from the emaciation of the orbital contents, in common with the other parts of the body, it was also very much sunken, which rendered the operation difficult, notwithstanding I readily reached the muscle with the bent probe. It will be interesting to follow this case, with the view of ascertaining if the muscles, which have now been fifty-seven years accustomed to particular actions, may not eventually bring the eye to its proper position, the inner rectus muscle having been divided.

To this date (April 23) the patient has not complained of a single bad symptom, the healing process having gone on most satisfactorily.

Case II.—April 21, 1840.—Mr. Crossland, aged 21, was born with his eyes straight. At Montreal, when five years of age, he was watching the return of his father from business at a time when a large quantity of snow was on the ground, the glare of light from which he observed to be very offensive, and was instantly seized with strabismus convergens of the left eye. He was quite unconscious of any deformity having occurred, until his friends remarked it to him. He was subjected to various kinds of medical treatment, and wore goggles. The summer following his eye got straight; but when the winter returned, it again became inverted, and has remained so to this date.

Present appearance.—The eye is turned deeply into the inner canthus. When the right eye is covered the patient can turn the affected eye half way outwards; but when both eyes are exposed, it instantaneously resumes its abnormal condition.

Mr. C. has been subject to headachs, reads a great deal, and for the last two years has been living on vegetable diet, for the cure of a cutaneous affection.

In the presence, and with the assistance, of Dr. Carroll, Mr. Toogood Downing, Mr. Wardrop, jun., and Mr. H. Downing, I performed the following operation:—A bandage was applied to the sound eye, to exclude the light, and the patient was seated on a low-backed chair before the window, and his head reclining against Mr. Doering's chest, who also supported the upper eyelid, by means of the wire speculum. Mr. Wardrop, jun., depressed the lower lid. The patient, who possessed great moral strength, everted the turned-in eye to his utmost, and with the greatest facility I introduced a small, fine-pointed hook into the inner conjunctiva, about three lines distance from the cornea, and with a very fine, straight knife I divided this membrane from below upwards, to the extent of half an inch, leaving the hook still attached to the inner segment of the incision. I next separated the divided inner portion of the conjunctiva from the subjacent sclerotic coat by means of a blunt probe, and having introduced between the lips of the incision the bent probe, I parted it underneath the tendon of the internal rectus muscle. The hook was now withdrawn, and the operation was suspended for a moment. I next raised the tendon by means of the bent probe towards the incision of the conjunctiva, so as completely to bring it into view, and with a curved scissors divided it. The eye immediately resumed its natural position. The hemorrhage did not amount to as much as two drops, and the operation was completed in a minute and a half.

Calomel, 2 grs; James's powder, 3 grs. A saline draught in the morning.

22d. The inner conjunctiva is slightly ecchymosed; the eye is perfectly straight. Mr. Crossland had a good night.

24th. Ecchymosis of conjunctiva is disappearing. The state of the patient is most satisfactory.

26th. The patient is in every respect going on well; he suffers no pain in the eye; the inner conjunctiva is still reddened, and a layer of lymph exists in the site of the incision; the redness evidently exists for the purpose of reparation, which is going on beautifully, as the patient was not aware of its existence until he saw it by means of a glass. He goes to business to-morrow.

Case III.—April 27th.—William James Egan, aged 10, was born with his eyes perfectly straight. When he was two years of age he suffered from convulsions, and after a more severe one than usual the strabismus took place.

Present state.—His left eye is turned deeply inwards, with a slight degree of obliquity upwards; its sight is not so powerful as that of the right; there is a slight degree of opacity of the inner circumference of the cornea, and the organ is more sunken than its fellow. With much exertion the patient can evert the eye to the extent of about four lines.

With the assistance of Mr. Downing, Mr. Bailey, Mr. Earles, and Mr. Snow, I performed this operation as follows:—The eyelids were held apart simply by means of the fingers; I seized the inner conjunctiva with a small sharp hook, and divided this membrane from below upwards, with a fine narrow-bladed knife. At the instant of doing this the eye forcibly turned more inwards, which retarded the operation a few moments: keeping the hook still fixed in the inner segment of the divided conjunctiva, I allowed the lids to cover the globe, and a few drops of blood were wiped away by means of a sponge and cold water. Exposing the eye again by simply elevating the upper, and depressing the inner lids with the fingers of two assistants, I readily exposed the incision of the conjunctiva, and having separated the connecting reticular tissue by a blunt probe, as in the other cases; I introduced the blunt hook, and with much facility passed it from below upwards, beneath the inner rectus muscle, and drawing it forwards, I divided its tendon with a curved scissors.

The tendon of the muscle was unusually thick and strong, far different from the appearance which it presented in the other cases; it *grated* beneath the blades of the scissors upon dividing it, which, being accomplished, the eye became instantaneously straight.

The whole operation only occupied two minutes.

In this case the speculum was dispensed with, and the only instruments used were a hook, a knife, a probe, and a scissors.

After the operation a cold bread and water poultice was applied to the eye, a powder, consisting of James's powder and calomel, was given, and the boy was put to bed.

This little patient evinced great strength. I explained to him beforehand the object of the operation, and saw he could assist us by everting his eye as much as possible, and which he did at the time it was most needed.

Remarks.—Were the operation of dividing the muscles of the human eye for the cure of strabismus, attended with danger to the organ of vision, with consequences of even a much less serious nature, the propriety of its performance might justly be regarded as questionable. But when it is considered that no bad consequences have followed this interesting operation—that the patient suffers but little during its performance—and that, in the cases to which it is applicable, the most gratifying success has attended it; its extensive application to the removal of strabismus cannot be too forcibly insisted upon.

As will be observed, on the perusal of the foregoing cases, and of those which have appeared in the Lancet of April 18th, the operation for the cure of strabismus which I have now successfully employed in five cases, differs in many, and I would say essential, particulars from that adopted by Professor Dieffenbach—indeed, when I first attentively considered the detail of the three cases as reported in the "British and Foreign Medical Review," I was struck with the number of hooks which were employed, and the necessity arising therefrom, for many assistants, who, in all operations, but especially in operations upon the eye, too often interfere with each other, and with the operator.

In Professor Dieffenbach's operation, no less than four hooks are employed, and one of these a double one; two for the purpose of keeping the eyelids apart, a third is passed into the conjunctiva, and the fourth, the double one, is fixed into the sclerotica. In none of the cases, with the exception of Catherine Cuthbert's, did I use more than one hook; and in the case of the child, Mary Anne Daly, I used none, having divided the conjunctiva with a knife and forceps. This latter instrument I have since found is not, for many reasons, to be depended upon as much as the hook; it gives more uneasiness to the patient, and is apt to lose its hold of the conjunctiva, which the hook never does until it is intentionally removed.

In deciding upon the best method of performing this operation, many circumstances must be taken into account in regard to the age of the patient; his moral courage; any cause which may disturb the relation of the orbit and its contents, so as to produce a too prominent eye or a too sunken one, as well as the degree of intensity of the strabismus.

In children it requires the greatest exertion to control their struggles. In the child Daly it was as much as two persons could do to steady her trunk and legs, the movements of which retarded the operation materially. On the contrary, in the case of Mr. Crossland, the great firmness he displayed, and the assistance he afforded me by everting his eye to the utmost, at the time I was passing the hook beneath the inner rectus muscle, rendered the operation almost bloodless, and enabled me to complete it in a minute and a half.

I have omitted to mention that I was indebted to the kindness of Mr. F. Kiernan, for the opportunity of operating on the boy Egan.

I have this moment seen the child, Mary Anne Daly; her eyes are perfectly straight, and a slight cicatrix is visible in the site of the operation.

BIBLIOGRAPHICAL NOTICES.

Stearns's Philosophy of Mind.[1]

The author is evidently an anxious inquirer after truth, and spareth no pains in the investigation. The topic, however, is one of intricacy, and requires a further examination than we can give to enable our readers to comprehend it. The whole subject indeed of metaphysics is presumed to be so obscure, that the word "metaphysical" is often employed synonymously with "incomprehensible;"—nor do we think the reader will be disposed to have a much clearer light after having perused the pamphlet before us. He must judge, however, for himself.

The fundamental principles of Dr. Stearns's Theory are professed to be the following:—

"I. Man consists of three entities, BODY, SOUL and MIND.

II. The ideas of sensation are those carnal ideas which constitute the animal propensities, and which we derive, in common with other animals, from the five senses.

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[1] Philosophy of Mind, developing new sources of Ideas, designating their distinctive classes, and simplifying the Faculties and Operations of the whole mind. By John Stearns, M. D., of the city of New York, late President of the Medical Society of the State. 8vo. pp. 25. New York, 1840.

III. The intellectual, and moral, and religious ideas, which some philosophers ascribe to reflection, and to innate principles, are derived entirely and exclusively from the soul. In the soul is held the high court of chancery, denominated conscience, or the moral sense.

IV. When the soul operates upon the brain, it produces what may be denominated *a moral mind*, endowed with intellectual and religious faculties: and until excited to action by this operation, the faculties of the brain remain perfectly dormant.

V. When the senses operate upon the brain, they produce what may be denominated *sensual mind*, which man possesses in common with the inferior animals, but which is essentially changed and improved by the accession of the soul to the body." p. 9.

Mütter on the Salt Sulphur Springs.[1]

We have frequently drawn attention to Dr. Mütter's successful labours as a skilful surgeon. The pamphlet before us exhibits him in a new sphere—the salt sulphur springs is the subject, and we fear that the very fact of having chosen such a topic has led him, in spite of himself, to too favourable a bias in regard to their virtues, which may hardly bear the test of observation in all cases. If an author commences with a disposition to eulogize—and no one takes up such a subject with a view to disparage—he is apt to be led away in spite of himself far beyond the sober limits within which he ought to be restricted. We have already given, more than once, our opinion of mineral waters in general, and have expressed the belief, that in the large mass of cases to obtain plenary benefit, they must be drunk at the source. Nor has the pamphlet of Dr. Mütter dispelled this belief. We doubt not, that the water in question is energetic in its action on the frame; but in the multitude of nervous and other diseases for which it is advised by Dr. Mütter, we must look to the curative agency of travelling air and exercise, change of society, scenery, social habits, rather than to the water itself. To one, however, who is about to visit the springs in question, we can recommend the pamphlet of Dr. Mütter, as containing much information of great interest to him.

MISCELLANEOUS NOTICES.

Dr. Gross.—Louisville Institute.—This gentleman has been recently appointed Professor of Surgery in the Louisville Medical Institute, on the resignation of Dr. Flint. The appointment we are sure is a judicious one. Dr. Gross has distinguished himself as an enthusiastic promoter of his profession more for its own sake than as a mere means of subsistence, and his recent work on pathological anatomy has exhibited with what success he has prosecuted a difficult and important branch. To that work we have already referred on two occasions; and we have esteemed this a more advisable plan than giving a lengthened notice of it, which neither our limits nor the nature of the work itself would permit. It is indeed impossible in the compass of a couple of pages to give any extract, which can do more than exhibit the entire inadequacy of the attempt to do justice to a work of two large 8vo. volumes. Yet although our limits restricted us to a brief notice, our opinion of the work was strongly and decidedly expressed, and a farther examination of it confirms those favourable sentiments.

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[1] The Salt Sulphur Springs, Monroe county, Va. By Thomas D. Mütter, M. D., Lecturer on Surgery, Corresponding Member of the New York Medical Society, Fellow of the College of Physicians of Philadelphia, Member of the Pathological Society of Philadelphia, &c. &c. 8vo. pp. 32. Philadelphia, 1840.

We are not in the custom of speaking in the language of hyperbole, but we can recommend it as strongly to our readers as any work which has fallen under our critical notice for years.

Annual Report of the Pennsylvania Hospital.—The following is the abstract of cases treated in this valuable charity during the year ending April 25, 1840.

Abstract of the Cases of 1155 *Patients treated in the Pennsylvania Hospital during the official year ending* 4*th month* 25*th*, 1840.

ADMITTED FOR	Cured.	Relieved.	Removed by friends, or at their request.	Discharged for misconduct.	Eloped.	Died.	Remain.	Total.
ACCIDENTAL INJURIES, VIZ.								
Burns,	7	4	0	0	0	8	3	22
Contusions and wounds,	108	12	10	1	0	7	5	143
Dislocations,	9	0	1	0	0	0	2	12
Fractures,	60	9	3	0	0	12	16	100
" Un-united,	2	0	0	0	0	0	0	2
Frosted,	5	3	0	0	0	0	1	9
Gunshot Wounds,	1	1	1	0	0	2	0	5
Poisoned,	1	0	0	0	0	0	0	1
Sprains,	7	1	1	0	0	0	2	11
DISEASES OF THE CHEST AND RESPIRATORY ORGANS.								
Asthma,	0	1	0	0	0	0	0	1
Bronchitis,	4	1	1	0	0	2	1	9
Catarrh,	4	0	0	0	0	0	0	4
Hæmoptysis,	0	1	0	0	0	0	0	1
Laryngitis,	0	0	2	0	0	1	0	3
Phthisis pulmonalis,	0	1	2	0	0	7	0	10
Pleurisy,	5	1	0	0	0	2	0	8
Pleuropneumonia,	4	1	0	0	0	0	1	6
Pneumonia,	8	0	1	0	0	3	2	14
Diseased heart,	2	1	1	0	0	2	1	7
DISEASES OF ABDOMINAL VISCERA.								
Cholera,	1	0	0	0	0	1	0	2
Colic,	1	1	0	0	0	0	0	2
Constipation,	2	0	0	0	0	0	0	2
Diarrhœa,	7	1	0	0	0	0	0	8
Dysentery,	9	1	0	0	0	1	0	11
Dyspepsia,	4	2	0	0	0	0	2	8
Diseased Spleen,	1	0	0	0	0	0	1	2

ADMITTED FOR	Cured.	Relieved.	Removed by friends, or at their request.	Discharged for misconduct.	Eloped.	Died.	Remain.	Total.
Fistula,	1	1	1	1	0	0	5	9
Gastritis,	3	3	0	0	0	0	1	7
Hernia,	0	1	0	0	0	0	0	1
" Strangulated,	1	0	0	0	0	1	0	2
Hæmorrhoids,	1	0	0	0	0	0	0	1
Hepatitis,	3	3	0	0	0	0	0	6
DISEASES OF GENERATIVE AND URINARY ORGANS.								
Diseased Uterus and Vagina,	0	7	3	0	0	0	3	13
" Bladder and Urethra,	3	7	0	0	0	0	1	11
" Testes and Penis,	4	5	0	0	0	0	0	9
Irregular Catamenia,	4	0	0	0	0	0	2	6
Nephritis,	0	1	0	0	0	0	0	1
Stone in Bladder,	5	0	0	0	0	0	0	5
Syphilis,	48	11	5	0	1	0	7	72
Gonorrhœa,	5	0	1	0	0	0	3	6
Bubo,	0	0	0	0	0	0	1	1
DISEASES OF BONES, &c.								
Caries and Necrosis,	2	1	0	0	0	0	3	6
Diseased Joints,	1	2	1	0	0	1	2	7
" Spine,	0	0	1	0	0	0	1	2
Periostitis,	1	0	0	0	0	0	0	1
DISEASES OF THE SKIN.								
Erysipelas,	1	1	0	0	0	1	1	4
Eruptions,	6	0	0	0	0	0	0	6
Psoriasis,	4	0	0	0	0	0	1	5
Tinea Capitis,	0	1	0	0	0	0	1	2
DISEASES OF THE NERVOUS SYSTEM, &c.								
Cephalalgia,	2	0	1	0	0	0	0	3
Congestion of the Brain,	2	0	0	0	0	2	0	4
Convulsions,	1	0	0	0	0	0	0	1
Chorea,	1	0	1	0	0	0	0	2
Paralysis,	1	1	6	0	0	1	5	14
Spinal Irritations,	0	0	2	0	0	0	1	3
DISEASES OF THE SANGUINEOUS SYSTEM.								
Aneurism,	0	3	0	0	0	0	0	3
Apoplexy,	1	0	0	0	0	1	0	2
Hæmorrhage,	3	1	0	0	0	0	0	4
Inflammations,	12	2	0	0	0	0	0	14
Icterus,	1	0	0	0	0	1	0	2
FEVER.	25	0	0	0	0	7	1	33
" Bilious,	1	0	0	0	0	0	0	1
" Intermittent,	39	1	0	0	0	0	2	42
" Remittent,	20	0	0	0	0	1	0	21
" Typhoid,	0	0	0	0	0	1	0	1
Small Pox,	3	0	0	0	0	0	0	3

ADMITTED FOR	Cured.	Relieved.	Removed by friends, or by their request.	Discharged for misconduct.	Eloped.	Died.	Remain.	Total.
MISCELLANEOUS CASES.								
Abscess,	3	1	0	0	0	0	3	7
Cancer,	1	0	0	0	0	2	0	3
Clavus,	1	0	0	0	0	0	0	1
Chlorosis,	1	0	0	0	0	0	0	1
Debility,	3	0	0	0	0	0	0	3
Diseased Eyes,	8	4	2	0	1	0	2	17
Dropsy,	3	2	0	0	0	2	3	10
Furunculus,	0	1	0	0	0	0	0	1
Fungus,	1	0	0	0	0	0	0	1
Gout,	1	0	0	0	0	0	0	1
Rheumatism,	38	9	0	0	0	0	13	60
Paronychia,	5	0	0	0	0	0	0	5
Tumour,	6	2	2	0	1	1	1	13
Ulcer,	22	3	4	0	0	0	4	33
Polypus,	0	0	0	0	0	0	1	1
Worms,	2	0	0	0	0	0	0	2
Insanity,	20	12	23	0	0	4	102	161
Mania a Potu,	18	0	1	0	0	2	0	21
	590	128	77	2	3	76	207	1083
LYING IN WARD.	safely delivered.	removed healthy.						
Pregnant Women,	30	0	1	0	0	1	6	38
Infants born,	0	24	0	0	0	7	3	34
			78	2	3	84	216	1155

Vermont Academy of Medicine.—The number of students in attendance during the last session, according to catalogue, was 57.

Ptyalism from the medicinal use of Arsenic.—By George Jones, St. Leonard's-on-Sea, April 28, 1840.[1]—In consequence of a paper by Mr. Hunt, reported at p. 77, vol. 2, of the Medical Gazette, I have occasionally prescribed arsenic in cases of mœnorrhagia, and with manifest advantage. The following very decided cure from its use was attended with symptoms which I have no recollection to have seen recorded as resulting from the medicinal use of this mineral, and may, therefore, not be uninteresting to your readers.

Mrs. L., æt. 46, stout in person, and of a florid complexion, says, that "for several months she has not been free from the menstrual evacuation, and that now she is almost drained by it."

℞. Liq. Arsenic, ʒiij.; Sp. Lav. C. ʒi. M. Capt. gtt. vij. ter quotidie ex aqua.

The case was nearly lost sight of for a month, during which she had continued to take the drops: at the end of that time, she applied to me on account of what, on a cursory view, led me to imagine was the effect of mercury—extreme fetor of breath, superficial ulceration of the gums and fauces generally, with increased salivary secretion. She then made the following statement:—After the drops had been taken, with little or no inconvenience, for a fortnight, the menorrhagia gradually subsided into an offensive discharge of a muco-purulent character, which has now left her altogether; at the same time the secretion of saliva increased, and her mouth became slightly affected. Not suspecting that the soreness could be referable to the medicine, she continued its use as long as it lasted. Her mouth continuing to get worse, she then made application for further advice. In about a week or ten days she became convalescent, under the following treatment.

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[1] Lond. Med. Gaz., May 8, 1840, p. 266.

℞ Magnes. sulph. ℥i.; acid. sulph. D. ʒi.; aquæ, ℥vj. M. partitis vicibus. sumend. donec respond alvus.

℞ Sol. sodæ chlor. ℥i. aquæ, ʒxi.; M. ft. lotio pro ore sæpe utend.

℞ Argent. nitrat. gr. iss. acid. nitrici, gtt. v. aquæ distill. ℥ij. M. Capt. coch. parvum, ex aqua 4tis horis.

Venereal Affections of Nose.—By Alex. J. Hannay, M. D., Surgeon to the Lock Hospital and the Royal Infirmary.[1]—I have derived much benefit in six cases of obstinate ulceration of the nose, and neighbouring parts, from *the daily* application of two, three, or four leeches to the gum on the upper jaw. All of these cases had assumed the inveteracy, obstinacy, and other characters, of that destructive process to which the name of lupus has been given. I had derived so much benefit in cases of venereal inflammation and its consequences from this practice, that I was induced to try it in the cases mentioned; and though they had resisted every method I had ever heard of for months, they yielded to the practice mentioned. The first applications brought relief from pain, reduced the redness and livor of surrounding parts, a gradual amelioration ensued, and, in the worst case, the cure was accomplished in forty-eight days, 140 leeches having been applied.

I can, therefore, with great confidence, recommend the above practice in cases of venereal affections either of the soft parts or of the bones of the nose, and, as far as six successful cases authorize me, I would advise the same in cases of lupus.

Of course, none of the measures calculated to improve the general health, or local applications likely to do good, are interfered with, and these should be diligently administered. I have been informed of one case of failure of the remedy proposed; but, before I can attach weight to it, I should wish to be quite sure that it was steadily pursued without a single day's interruption. Sincerely do I hope others may derive that benefit from the measure which has fallen to my lot.

Translation of Bouillaud on the Heart—We learn that a translation of Bouillaud's valuable work on the heart is in preparation by Dr. Dubarry of the Navy.

University of Maryland.—Sixty-five students attended the lectures during the last session. The degree of Doctor of Medicine was conferred on 14. We learn that our friend Professor N. R. Smith is engaged to deliver a course of lectures on surgery at this institution, before he proceeds to fulfil his engagement at the Transylvania Medical School. The session of the University of Maryland will therefore open in September; and during Dr.

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[1] Lond. Med. Gaz., May 8, 1840, p. 276.

Smith's absence an additional course of lectures on surgery will be delivered by Dr. W. N. Baker.

Washington University of Baltimore.—The degree of Doctor of Medicine was conferred on twenty gentlemen at the last commencement of this institution.

M. Ricord.[1]—M. Ricord, whose labours in the investigation of the venereal disease are so well known to our readers, has been passing a few days in London, which he has devoted to visiting the hospitals and other medical institutions.

Sir C. Bell.[1]—Sir Charles Bell is in London, on his way to Rome. It has been said that he intends to vacate his Professorial chair in Edinburgh, the University not affording him the position and advantages which were anticipated on his retreat to that city. He has, however, long been anxious to visit Italy, where John Bell, after his residence in Edinburgh, spent some time in study.

[In a more recent number, Sir Charles has contradicted the rumour in regard to his dissatisfaction with his present position.—Ed.]

BOOKS RECEIVED.

From the Author.—The Salt Sulphur Springs, Monroe county, Va. By Thomas D. Mütter, M. D., Lecturer on Surgery, &c. 8vo. pp. 32. Philadelphia, 1840. (See Bibliographical Notices.)

From the Author.—Rhinoplastic Operations with some remarks on the autoplastic methods usually adopted for the restoration of parts lost by accident or disease. By J. Mason Warren, M. D., (Republished from the "Boston Medical and Surgical Journal.") 8vo. pp. 28. Boston, 1840.

From the Author.—An Introductory Lecture to a course on the principles and practice of surgery, delivered in the Vermont Academy of Medicine, March 12, 1840. By James Bryan, M. D., Professor of Surgery in the above Institution, Member of the Philadelphia Medical Society, &c. &c. 8vo. pp. 12. Rutland, 1840.

From Professor Bryan.—Catalogue of the Trustees, Faculty, and Students of the Vermont Academy of Medicine, for the Session of March, 1840. 12mo. pp. 12. Rutland, 1840.

[1] London Lancet, May 2, 1840, p. 206.

[2] London Lancet, May 2, 1840, p. 208.

THE

AMERICAN MEDICAL INTELLIGENCER.

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For the American Medical Intelligencer.

ART. I.—PSOAS ABSCESS.

BY ROBERT VOGAN, M. D., &c. &c.

Columbia, South Carolina, May 15, 1840.

CASE.—Jno. Keegan, ætat. 19, labourer, of an unhealthy aspect, with dark hair and eyes, and apparently of a scrofulous diathesis, was admitted into hospital, with a prominent tumour at the lower and anterior part of the abdomen on the left side immediately above Poupart's ligament.

He referred the commencement of his disease to a period of two years distant: he then found himself unable to walk as well as usual, and felt a degree of uneasiness and weariness about the lumbar region, which was particularly distressing after walking, also if he remained long in the erect posture, or if, when sitting, he would rise up suddenly or incautiously. The same uneasiness was experienced in the attempt to raise any heavy weight, such as carrying a sack, &c. About this period he met with an accident in crossing a loft, by which he slipped, and as he terms it, overreached himself: this produced a temporary aggravation of his sufferings, and obliged him to confine himself to bed for some days. The weakness and uneasiness in the back continuing, he has been compelled to give up his occupation, and he has been moving about with the assistance of a crutch. About five months ago, he observed a colourless swelling about the size of an egg at the lower part of the abdomen on the left side, and refers its first appearance, somewhat nearer the region of the internal ring.

Having been told that he laboured under a hernia, he was directed to wear a truss, from which he suffered much, and under the use of which a rapid increase of the swelling took place. His health has been latterly declining, he is in some measure losing flesh—feels hot and feverish towards evening, has occasionally irregular rigors, and partial perspirations—his appetite is in general good—there is some thirst, and his pulse, as far as at present can be learned, being easily excited, ranges about 90, sometimes as high as 100.

The lower and anterior part of the abdomen on the left side presents a swelling of considerable magnitude, occupying the space between the os pubis and the anterior superior spine of the ilium, folding over Poupart's ligament, and ascending obliquely across the side of the umbilicus towards the lumbar region. The surface of the tumour is not uniformly even; the integuments covering it being irregularly thinned, and at these points presenting a shining and partly discoloured appearance. It is remarkably tender to the touch, particularly around the circumference, which is well defined. A most distinct fluctuation exists, and a marked impulse is given to the tumour during the act of coughing or sneezing, &c. It is very firm and tense in the erect posture, but flatter, softer, and more lax in the horizontal, is unaccompanied by any derangement of the bowels, and always retains a considerable size: when standing the body is bent forwards, and there is an incapability to raise it, at least without pain.

Progression is not attended with any peculiarity, nor does he remark any disposition to trip.

Examination, whilst in the horizontal position, discovers a most visible displacement in the direction as well as in the position of the second lumbar vertebra—a remarkable bony projection also exists in the situation of its transverse process, where pressure produces considerable uneasiness.

Observations.

Before entering into the consideration of the case above related, it may not be amiss to mention that there are two forms of abscess, named with respect to the period of their duration and attendant symptoms, and are distinguished by the terms, "Acute" and "Chronic."

The "acute" abscess is exemplified by phlegmon—is attended with heat, pain, redness and swelling—has a great tendency to come on rapidly—is not large—is well circumscribed—the parts between the sac and integuments become engaged, and the parts which are engaged present a reddish or purplish appearance: besides there is this one great characteristic, that when it breaks or is opened, great relief is afforded, and it has a wonderful tendency to heal, as the cavity is soon filled with granulations, and the healing process rapidly progresses towards a cure.

This is different from the "chronic" abscess, where there is little or no pain—no phlegmonous inflammation, and when examined there may be either an increased determination of blood to the part, or merely a slight degree of vascularity: the cellular membrane is engaged, and the cavity, which is organised, is endowed with arteries, veins, nerves and absorbents—the arteries designed to secrete the fluid it contains, and the absorbents to remove it, but this office of the absorbents is very rarely indeed performed. The superincumbent parts are not engaged until the disease has arrived at an advanced stage, and they preserve their natural colour, which is not the case in the acute form—the cyst of the abscess may be as thick as sole leather—it is hard, firm and resistant. The abscess is inclined to affect parts remote from its original situation, as in psoas abscess, thus it has its seat in the loins, yet it often appears in the thigh; not so in the acute abscess; so that whenever a tumour is presented to the surgeon's view, as in that of Keegan, where it extends to the thigh, it is one continued sac, reaching from its original seat to the point, where it makes its external appearance. Another remarkable circumstance connected with the chronic form of abscess is, that when it breaks, it evinces no tendency to heal, but increased action supervenes, and there is an alteration in the nature of its contents. Its opening is to be dreaded, particularly in deep-seated abscesses, whether this is effected by the natural process or by surgical means.

There exists also considerable difference in the nature of the fluid which the chronic and acute abscesses contain: in the chronic it is of a wheyish character, with flocculent matter floating through it—it is not of uniform consistence, but is serum with flakes of lymph; whereas in the acute form it is in general of uniform consistence, is thick, and in appearance resembles cream; this characteristic has been noticed by every author who has written on the subject.

Psoas abscess, therefore, is found in every respect to deserve the name of chronic, which is evident from an investigation of the case above detailed, since he has been labouring under it for a period of two years. The first symptoms to attract attention are, an inability to walk as well as usual—weariness in the loins, where the disease is situated—great difficulty in raising up the body when stooping—great distress in the erect posture, in consequence of the interference of the disease in the action of the psoas and iliacus internus muscles—complaining of a sensation of pain in parts very remote from the true seat of the disease, as the hip, groin, knee, &c., and hence arises the difficulty in forming a diagnosis between this affection and morbus coxæ. The tightening in bending the knee sometimes exists to such a degree, that the diagnosis is extremely difficult, particularly in the early stages of the complaint.

Pain in the back—want of free motion—pain, stiffness, and constriction in the side are present before there is any external mark of the disease. From the history of this case, it is found, that it is only five months since a tumour was apparent externally, and consequently that a period of one year and seven months had elapsed from the first attack of the affection until it made its external appearance, and that he laboured under it from that time.

There are various directions it may pursue, previously to its bursting externally—it may either open in the lumbar region—in the layers of the abdominal muscles, or in the groin, following the direction of the tendon of the psoas magnus muscle so as to appear like a hernia: the reason of this appears to depend upon the part of the muscle, which is first attacked, or where its original seat is:—ex. gr.: if it commenced in the posterior part of the muscle, it will make its appearance in the loins: if in the lateral part, in the layers of the abdominal muscles; and if in the anterior part, it will appear in the groin: hence, its external appearance is owing to its primitive seat. Recovery from the disease may be considered to be more certain, when it shows itself near to its original situation, as it is then smaller, contains less pus, and has not engaged so many parts.

The constitutional symptoms depend in a great measure upon the irritability of the patient and his original stamina: sometimes before there is any external appearance of the disease, hectic fever supervenes; at other times, not until it has manifested itself by external symptoms, when the patient is found to be subject to rigors—heat of skin and nocturnal perspirations, and the countenance becomes very pale. In the case under consideration, the fever is not fully formed, as he has not so much of an unhealthy aspect, as he is subject to agitation, when examined; his appetite moreover is good, which is not an usual symptom in hectic fever arising from lumbar abscess, for in surgical hectic there is generally no appetite, but in medical hectic, the appetite is often good to the last. If the fever does not supervene until the abscess breaks or is opened, it will be found to do so when that effect is produced, at which time the hectic symptoms are more clearly marked, the heat of the skin is very great, and the nocturnal perspirations with diarrhœa soon wear down the patient. In the case of Keegan, the fever will soon appear, as the tumour is of a large size, and there is therefore a great destruction of parts: it is not uniform even on its surface, but is prominent in two distinct places, owing to its being irregularly thinned internally by the ulcerative absorption, and if it is not opened, it will break at one of those points, where the thinning process has taken place.

These tumours when in the seat of hernia are often mistaken for that disease, and it is surprising that such a mistake can occur. In the foregoing case, however, as may be learned from its history, it was mistaken for a hernia, because it was a tumour which increased by coughing; and the *person*, who was first consulted, ordered a truss to be applied for its relief, the pressure of which created an additional pain in the symptoms, and it is more than probable, the inequality also of the surface, by exciting the absorbents of the part where the pressure was directly applied. It might be more likely to be mistaken for a hernia, whilst in the groin, as it increases in bulk when in the erect posture, and retires when in the horizontal if pressure is employed, but returns when the pressure is removed; this is not the case in hernia—there is besides a fluctuation constantly existing—but the difference is so great and striking, that it is unnecessary to enter further into detail. It is evident that the tumour is one cyst, extending from its original seat in the loins to the groin, and if the patient is placed in the horizontal position, its external appearance may be obliterated; but in the erect posture, its own gravity and attendant pressure will render it more tense and full.

The symptoms, therefore, are, 1st, pain and distress in the motions of the part; and 2ndly, the parts at a distance become affected, as the groin, knee, &c., inability to move the limb, rigors, hectic symptoms, and then the tumour makes its external appearance, and the disease becomes evident.

The prognosis in the case of Keegan is bad—it is to be presumed that it is so, from a consideration of the length of time the disease has existed, although he has not suffered much in his general health, but depression of strength and hectic fever will supervene, as soon as the abscess breaks: the size of the tumour militates also against his recovery, for the goodness of his health will not counterbalance the quantity of parts it has engaged, as it extends from the upper part of the psoas muscle as far down as the groin: again, it is connected with the spine, as there is displacement of the spinous and transverse processes of the second lumbar vertebra, which would make the surgeon dread great danger, as each of these diseases is *singly* capable of inducing a fatal termination by hectic fever: here, therefore, is caries of the vertebra, which will terminate in Pott's curvature of the spine, should the patient survive any length of time.

Injury or cold will give rise to this disease; in this case, Keegan attributes the origin to an injury by overreaching himself, but from the history of the case, it is evident, that it existed some time previously to the receipt of the injury—it is more than probable that he has lain in a damp place, for I believe that lying in a damp bed is, in a person predisposed to scrofulous disease, the most frequent source of this complaint.

The next thing to be considered is the TREATMENT of the disease. If seen at its commencement, when there existed pain and difficulty in standing, or want of power in raising the body from the bent to the erect posture, a horizontal position should be enjoined—complete quietude—the application of leeches—cupping—irritation of the surface by moxa or blisters—attending to the general health and giving a nourishing but not stimulating diet, form the basis of treatment at the dawn of this affection. This plan, however, will not always succeed or arrest the progress of the disease, yet it has the advantage of affording the fairest chance of recovery to the patient. In the case under investigation, matters wear a different aspect; all the above line of treatment has been neglected, and not the slightest chance of recovery given him.

A question arises, whether the tumour should be opened or not? On this subject there is a variety of opinions. And whether if it be not larger than a tennis ball, should it be opened, whilst the integuments are disengaged? On this point I may observe, that I have seen as many cases recover where the surgeon did not interfere, as where the abscess was opened, and that too at an early period: so that the preference may be given either to nature or to art. At all events, I would open it early, if the abscess was small, and I had a good constitution to deal with, and no hectic fever existed: but if the constitution was bad, and there was cough or any symptom to denote the existence of a latent disease in the lungs, I would not attempt it; for in such a case the operation would be worse than unsuccessful, it would expose me to the censure and animadversion of the patient and his friends, for they would attribute all the ill consequences of the operation to the means I had resorted to. In the case of Keegan, it would be bad practice to interfere, on account of the size of the sac, its connection with the lumbar vertebra, and being thinned in three places with diseased condition of the integuments; for, although it should be opened, the ulcerative absorption at these points would not be prevented from taking place, but would go on; the pain would be less, it is certain; but hectic fever will soon supervene, which will terminate his sufferings.

If it is to be opened, it has been recommended to do so with a flat trocar or a lancet: in opening chronic abscesses, whether lumbar or not, the object to be held in view is to make a valvular opening, which can be done with a lancet: if this instrument is used (the patient is supposed to be lying on his back) it is pushed in the horizontal direction for about a quarter of an inch between the sac and integuments, and then into the sac: if the matter be too thick to flow out through this opening, a director can be introduced. By making a valvular opening, the matter does not press on the skin, it can be more easily closed up, and the atmospheric air does not come in contact with the internal cavity. This does not always succeed; but whether the lancet or trocar is employed, a valvular opening should be made.

When hectic fever is set in, recourse must be had to the different remedies which are recommended and adapted to its different stages: sometimes the perspirations are most distressing; at other times, the diarrhœa; also must the remedies vary; let the diet be nourishing, give wine, porter or ale, and in those cases give it liberally.

It seldom happens without the cyst breaking; cases, however, have occurred where the matter has been absorbed. A most remarkable case came under the observation of Professor Wilmot, where the matter was absorbed, and air secreted in its stead: the following particulars of this phenomenon I extract from the 2d vol. of the Transactions of the College of Physicians in Ireland, p. 26.

"Martin Carroll, aged 22 years, a strong athletic young man, was seized about the beginning of 1814, with a pain in his loins after lying on a damp bed. He was repeatedly blistered for this pain, without receiving any decided relief. After a lapse of nearly twelve months his health began to decline. He was now frequently attacked with a creeping in his skin, and a chilliness towards evening. Says he got hot and restless soon after going to bed, and that after sleeping his face and breast were moist with perspiration. Appetite bad; great thirst; suffered at this time much from an acute pain in his left knee; says that the pain in his back is much increased by striking his foot against any unyielding body.

"A tumour now appeared in the left groin, which alarmed him greatly, and was the cause of his coming to town for advice. I now saw him for the first time, which was in the winter of 1814, and learned from him the history which I have just detailed.

"On examination, I found the tumour about the size of a tennis ball, but flat, and immediately under Poupart's ligament, accompanied with a swelling above it. The integuments covering the tumour were a little discoloured, and a distinct fluctuation could be felt within it; it was also slightly affected by coughing and the horizontal posture.

"From the history of this case, and from the feel and appearance of the tumour, I had no hesitation in declaring it to be a well marked case of psoas abscess; Dr. Stoker, who brought the patient to me, coincided in this opinion. We agreed to tap the tumour, but the patient refused his consent and returned to the country. I should have mentioned that there was no disease of the vertebra.

"After the interval of nearly a year, he came to town again, resolved to submit to any treatment I might think fit to advise. On his second visit, I was not a little surprised to find that the tumour in the left groin, though very much increased in size, had lost all the characters of an abscess. It was now of a conical shape, it measured nearly 14 inches in circumference at the base, and from base to apex about 7 inches; all sense of fluctuation within the tumour was now gone, and it had a tympanitic and elastic feel. The integuments had now ceased to be discoloured, and were very loosely connected to the tumour, whose parietes felt about the thickness of the tunica vaginalis in an old hydrocele; they were not, however, of a uniform thickness, the apex being much thinner than any other part. The patient's health was now completely re-established; the hectic symptoms, and the pains and weakness of his back, which he complained of at the commencement of the attack, gradually declined without any medical interference, but the tumour continued rapidly to increase, producing considerable inconvenience by its bulk, and preventing him from following his usual occupations.

"On making a more minute examination of the tumour, in order to ascertain its contents, I found that its cavity communicated freely with the abdomen, and that I could very easily empty the contents of the tumour into the cavity of the abdomen through this passage, which makes it evident that the external sac was an elongation of the internal cavity. When this was accomplished I could feel the femoral ring greatly enlarged, and a considerable cavity under it among the muscles situated at the upper and anterior part of the thigh. On removing the pressure, which was necessary to empty the sac, it suddenly became distended to its usual size, though the patient lay in the horizontal position; from this circumstance together with the elastic and tympanitic feel of the tumour, and from its having lost all characters of an abscess, I had no hesitation in asserting that air was now its contents. This may appear strange at first, but very little consideration will satisfactorily account for its existence.

"We know from numerous pathological facts, that the cysts of abscesses are highly organised, having arteries, whose office it is to secrete pus, and absorbents, which not unfrequently take up, either totally or in part, the matter in contact with them. In the case under consideration, the matter was entirely absorbed, and there was also a cessation to the secretion of more matter, in consequence of the great change in the patient's constitution. The arteries having ceased to be employed in the secretion of pus, now assumed the office of secreting air, and by this means the gradual obliteration of the cyst by contraction was prevented, which is usual in ordinary cases, when the matter is removed by the absorbents. There is no point in pathology better established, nor one more universally admitted, than the power of arteries to secrete or separate air from the blood. This is proved in cases of emphysema, where the lungs are entire, and also in that affection called tympanitis; if then it is admitted that the arteries of the cellular membrane, and of the stomach, and of the intestines, can at times secrete air, I cannot conceive I have advanced any thing strange or inconsistent, by allowing a similar power to the arteries of a cyst of an abscess, whose integrity has not been destroyed, either by a natural or artificial process.

"The disappearance of pus and the formation of the air being accounted for, the rapid increase of the tumour externally, and its contracted limits internally, may be easily shown. Air being an elastic fluid, the bulk depends on the degree of pressure to which it is exposed. From the dissertation already given it appears that the sac which contained this air was situated partly within and partly without the cavity of the abdomen. The internal portion being originally thicker, the disease being first formed there, and being compressed by the surrounding viscera, was capable of affording more resistance than that portion under Poupart's ligament, it being thinner and less compressed. This resistance given to the air within together with the force of gravity, caused more of it to descend to the depending part; and here meeting with less resistance, it expanded and dilated this part of the sac, so as to produce a tumour of the size described. Being firmly convinced of the nature of the case, I saw that there were two modes of giving relief; one by puncturing the tumour and letting out the contained air, and then bringing the sides into contact, so as to cause the opposite surfaces to adhere, and in this way destroy the cavity; or by pressure, to promote its absorption, and by a continuation of the pressure to bring about obliteration either by contraction or adhesion. I determined upon trying pressure, which succeeded most effectually. I applied a bandage and compress, wet with a strong decoction of oak bark and alum; this application produced a considerable corrugation of the skin. In about three weeks the air was almost entirely absorbed, and the sac considerably diminished. I now got a truss made with a pad so as to cover the entire extent of the sac. The patient was now able to walk, and in about four weeks from putting on the truss, left the hospital perfectly free from any swelling."

ROBERT VOGAN.

ART. II.—FATAL SPASMODIC AFFECTION OF THROAT.

BY R. R. CHEYNE.[1]

A gentleman, aged 34 years, of a highly scrofulous diathesis and feeble constitution, which he possessed in common with nearly every member of his family, had been attacked from time to time, both before and after I was first consulted (now about five years since) with low fever, bringing in its train soreness of the throat, with weakness, loss of voice, dry convulsive cough, dyspepsia, violent spasms of the stomach and vomiting, vertigo, discharge from the ears, and deafness. These symptoms (which did not always prevail together) were usually attributed to catarrh, and lasted sometimes only a few days; at others, a week, or more, leaving, in the intervals of each attack, a state of tolerable health. In addition, however, to these more occasional indications of disease, scrofula, in either an active or passive form, prevailed to an intense degree in various parts of the body, and in particular the glands of the neck were enormously enlarged. Extensive suppuration and ulceration in the latter region, as well as in the left foot, took place about three years ago. The discharge from the neck continued during the ensuing two years; that from the foot (depending upon the presence of necrosis) persisted to the last. It is remarkable that this profuse rejection of scrofulous matter through the channels of external suppuration seemed to have materially increased the general vigour for the entire year preceding the termination of life.

The disease, which issued in my patient's death, commenced as fever of a remittent character and low type, attended by slight soreness of the throat and hoarse voice, dry cough, spasms of the stomach, and total loss of appetite. There were no physical signs of tubercular deposition in the lungs, but there was very great diminution of the sounds and impulse of the heart.

The above symptoms gradually declined in severity, so that, at the expiration of a week, they had almost disappeared, when suddenly the case assumed a new and very alarming aspect. The sufferer had awoken out of composed sleep in a fit of dyspnœa, which lasted about a minute, and this had recurred a second time in the course of the quarter of an hour which elapsed before I could reach him. His countenance was then anxious; skin bathed in perspiration; pulse sixty, (common to his best health,) and feeble; respiration perfectly tranquil, and deglutition performed with ease. Shortly after my arrival, I had an opportunity of noting the real nature of the spasms. It was evidently seated in the throat, and compelled my patient to make repeated and violent efforts to fill the lungs, each inspiration producing a crowing sound, exactly like what is noticed in the laryngismus stridulus of children. Before I left him, he had fallen into quiet sleep, which was of some hours' duration, and, with the exception of a slight return at the moment of awaking, he remained free from his alarming symptom, until the evening of the next day, when, directly after the act of deglutition, he was suffocated in the midst of the most awful struggles for air.

It is unnecessary to occupy space in the minute description of the treatment pursued in this case. Upon this head it is sufficient to remark, that throughout the general principle was steadily kept in view, of supporting the strength, as far as this could be done with a due regard to the nature of the symptoms. I am not sure that the operation of laryngotomy could have been performed with propriety in the absence of any permanent embarrassment in respiration, or of any local or constitutional signs of organic disease of the larynx.

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[1] Lond. Med. Gaz., May 8, 1840, p. 258.

Autopsy, 80 *hours after death.*—Much objection was made to the examination of the body, and then the dissection was confined to the neck. I was assisted by my friend Mr. Forbes.

Externally, the neck appeared crowded and bulky, and was marked, from ear to ear, by the scars of former ulceration.

Upon reflecting the skin, platisma, and fascia, numerous superficial glands were exposed in the course of the external jugular vein. The superior cervical glands, and a chain prolonged in the course of and beneath the great vessels and nerves of the neck, were some of them of a large size, whilst all of them displayed different steps, in the series of morbid changes, peculiar to scrofula. Many of these glands completely surrounded and adhered to the sheath of the vessels in its entire course; whilst others, more scattered, must have exerted considerable pressure upon the sympathetic, and those branches of the vagus nerve supplying the pharynx, its constrictor, and the structures of the larynx. The glottis and epiglottis were œdematous, the mucous membrane being of a paler tint than natural, and when laid open, throughout the larynx and trachea, was found to be free from ulceration, and altogether healthy.

Remarks.—The history of this case, and the result of the dissection (limited as it was) illustrate, in a very satisfactory manner, certain points in physiology and pathology. In the first place, I was disposed to think that the œdema of the glottis did not materially impede the act of respiration. I am, however, aware that very slight obstruction, in this situation, might occasion fatal spasm; but, then, an inflamed or ulcerated state of the mucous membrane almost invariably co-exists as a source of irritation. The interruption to the venous circulation, which must have arisen from the presence of such a mass of enlarged glands, in the vicinity of the glottis, or the violent contraction of the parts, which had taken place just before the death of my patient, may certainly have produced the serous effusion.

It is well known that pressure upon the pharynx or larynx by means of any tumour may excite spasms of those organs, simply from irritation of the sensitive nerves of the mucous membrane, and the reflected influence of the motor nerves; and, also, that *direct* compression or irritation of nerves induce various, more or less important, derangements of their functions. In my friend Dr. W. Baly's abstract of Dr. J. Reid's experiments upon the eighth pair of nerves, it is stated, first, that, on irritating the pharyngeal branch of the vagus, rapid and vigorous movements of all the pharyngeal muscles and upper part of the œsophagus follow; secondly, that irritation of the inferior laryngeal nerve produces strong movements of the arytenoid cartilages, while irritation of the superior laryngeal nerve (by galvanism) gave rise to no action in any of the muscles attached to the arytenoid cartilages, but merely to contraction of the crico-thyroid muscle; thirdly, that division of the recurrent nerves put an end to the motions of the glottis, but that the sensibility of the mucous membrane remains; that division of the superior laryngeal nerve leaves the movements of the glottis unaffected, but deprives it of its sensibility; fourthly, that irritation of the trunk of the vagus excited motions of the œsophagus which extended over the cardiac portion of the stomach.[1]

Müller remarks, "that the vagus affords sensitive influence to the organs of voice and respiration, the pharynx, œsophagus, and stomach;" and that "from irritation of the branches of this nerve, which is propagated to the brain, a number of spasmodic movements of the organs of respiration, as coughing, vomiting, &c. are produced." He goes on to say, "that a consideration of all the different results, obtained after tying or dividing the nervus vagus, leads to the inference that death arises from the concurrence of different circumstances, which, at last, produce suffocation. They are the following:—first, incomplete paralysis of the muscles of the glottis; second, exudations in the lungs; third, change in the chemical process going on in the lungs; fourth, coagulation of the blood in the vessels, as observed by Mayer."[1]

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[1] Müller's Physiology, by Baly.

It seems to me, that the pathology of the case I have above detailed offers very beautiful evidence in support of the views of experimental physiology. It is, indeed, difficult to explain many of the remarkable symptoms from which my patient had been so long a sufferer, (and particularly those which preceded his death,) otherwise than upon the supposition that they sprung from direct or indirect irritation of the sympathetic and vagus nerves. And I may add, that probably most of those obstinate spasmodic affections of the organs of respiration and digestion, which so frequently occur in children and adults of a scrofulous habit, owe their origin to a similar cause. The troublesome dyspepsia, also, to which such individuals are extremely subject, perhaps may depend upon the existence of some obstacle to the passage of nervous influence, and the consequent diminution of secretion.

In connection with the above remarks, it is instructive to observe how continually, in the irritable constitutions of children, the sensitive influence of the vagus, and its organic actions, derived from the sympathetic nerve, are disturbed, so as to produce disease which simulates inflammation, but which is purely of a spasmodic nature. For example, a child, said to have been in good health until the moment of the attack, (although the bowels have, in all probability, been torpid, and the motions deficient in bile for some time previously,) is suddenly seized with wheezing, dyspnœa, and cough, the pulse being rapid, the skin hot, and the face flushed. This very common sympathetic and spasmodic affection is too often treated as inflammation of the lungs, to which, indeed, it bears a strong resemblance; but it goes off as rapidly as it came on, and really requires nothing more than one or two emetics, and an active mercurial purgative. Much the same condition exists (requiring similar treatment) in many of the cases, called asthma, occurring in adults, and in which the attack may often be distinctly referred to some irritation of the stomach, excited by error in the quantity or quality of the diet. Experience, however, teaches us that irritation or congestion of the brain itself mostly co-exists with, if it do not precede, derangement of the organic functions. Thus, in infantile remittent fever, (the phenomena attending which well illustrate the dependence of nutrition and secretion upon the nervous system,) the paroxysm is marked by an extremely rapid pulse, a flushed face, suffused eyes, hot skin, and drowsiness; or, in other words, by evident cerebral irritation. There are immediately established sympathetic affections of the lungs, stomach, and liver, viz., increased secretion of mucus in the air tubes, with cough, and more or less paralysis of the stomach and liver, as indicated by a total want of appetite, and costiveness. If food be taken, it is generally vomited in an undigested state, and the motions are chalk-like, or clay-coloured, from deficiency of bile. As the disease advances, delirium, screaming, strabismus, &c., point out a more acute affection of the brain; and, as might be expected, this state is productive of still greater disturbance of the functions of the nerves supplying the organs of respiration and digestion, so that, after a few weeks, if soreness does not follow the treatment, the little patient dies from absolute exhaustion. It is of little consequence to determine whether the brain has been primarily or secondarily affected, inasmuch as the appropriate remedy is adapted for either view of the case. This remedy I believe to be calomel, continued perseveringly in small doses, at regular intervals, until the local and general symptoms give way.

In conclusion, I would observe that numerous cases are daily met with in the practice of medicine, which appear under the forms of obstinate functional disorders of the organs of respiration and digestion, combined with imperfect nutrition and secretion, in which, after the failure of ordinary measures, it would, no doubt, be of much advantage to devote a more exclusive attention to the nervous centres.

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[1] Müller's Physiology, by Baly.

ART. III.—ACETATE OF LEAD IN BRONCHITIS.

BY WILLIAM HENDERSON, M. D.[1]

Fellow of the Royal College of Physicians, and Lecturer on Practice of Medicine, Edinburgh.

Several years ago, having had repeatedly occasion to regret the inefficacy of the medicines commonly used in bronchitis, when the object in view was the restraining of a too abundant secretion, by which the bronchial tubes were loaded, and the respiration greatly embarrassed, I was glad to avail myself of a notice contained in the Medical Gazette of 1833, and extracted from Rust's Magazine, in which the virtues of the acetate of lead were represented as specially adapted to the circumstance in question. The cases in which I had had the greatest reason to feel the want of a remedy which could restrain the secretion from the bronchial membrane, were the bronchitic disorders of children, occurring in connection with measles and with hooping-cough; and it was in cases of this kind that I subsequently had the satisfaction of first witnessing the beneficial operation of the acetate of lead in inflammation of the bronchial mucous membrane.

After a careful investigation of the powers of this remedy, continued for several years, and based on an ample compass both of personal observation and the reported experience of several practitioners to whom I recommended the use of it, I feel warranted in stating my conviction that the acetate of lead is a remedy by far the most worthy of reliance in bronchitis attended with profuse secretion. The useful agency of this preparation is not confined to the bronchitis of measles and hooping-cough, but is equally observable in the simple bronchitis, and in that which so often occurs as a complication of continued fever. In whatever class of cases I have prescribed it, its administration has been limited to that period of the bronchitis in which the evidences of abundant secretion were apparent; and those evidences have formed the only guides which I have found it requisite to follow in the first exhibition of the remedy, and in regulating the bulk and frequency of the doses. The stage or duration of the disease does not require to be regarded in prescribing the acetate; and, though it exerts a signal and most salutary influence on the secretion of chronic mucous catarrhs, it has always appeared to me that its chief value consists in the rapidity of its operation in such acute cases as are characterised by copious secretion, whether of the muco-purulent appearance or not, whereby the respiration is impeded, and suffocation is threatened.

In acute bronchitis, diverse effects have been observed to succeed the use of the lead. In some instances a very speedy and entire removal of the rattles has ensued, without the pulse having been lessened in frequency, or the respiratory acts materially altered from their previous condition. In such I have been accustomed to omit the lead, and to recur to the antimony, ipecacuan, and calomel, or to whatever remedy had been previously used. In a second class of cases, the rattles have merely undergone a considerable diminution, while the other symptoms have continued nearly or altogether as before. In those I have found it of great advantage to alternate, with the exhibition of the acetate of lead, either the antimony or calomel and ipecacuan. In a third class, no material change of any kind has followed the use of the lead for several days. The cases of this class, for the most part, consisted of hooping-cough, with intense general bronchitis; and in the treatment of them, the acetate has been given in much larger quantity, and continued longer than in the others. I have repeatedly ascertained, in cases of this kind, that though the number of rattles, and the apparent amount of the secretion, seemed but little reduced from the state which they had presented on the lead being first administered, a marked change for the worse has followed the omission of it. In this class of cases, the doses of lead have been usually alternated with those of some common remedy; yet the latter have been frequently omitted, unless some indication of pneumonia existed, without apparent disadvantage. In a fourth class, composed mostly of cases in which the secretion appeared, from its extreme abundance, to be the principal cause of the more harassing symptoms—to wit, the hurried acts of respiration, dyspnœa, and consequent restlessness, &c.—the decrease in the number of the rattles, more especially the larger mucous rattles, which has commonly soon followed the administration of the lead, has been very generally accompanied by a commensurate decrease in the other important symptoms. In not a few instances of feeble children, labouring under acute general bronchitis with copious secretion, have the effects of the acetate been observed, by myself and others, so promptly and decidedly manifested as to excite no little surprise, and to alter the prognosis speedily, from a very gloomy to a very cheerful aspect.

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[1] Lond. Med. Gaz., May 8, 1840, p. 263.

The dose in which this medicine may be given must vary with the exigencies of the case and the age of the patient; though the latter particular is of less importance. Indeed I have hitherto found occasion to give it in much larger quantity to children than to adults, owing to the much greater frequency and severity of acute bronchitis in the former. The quantity taken in twenty-four hours by an adult has not exceeded twelve grains, in doses of from one to three grains. The cases of acute bronchitis in the adult in which I have used the lead, have been mostly complications of continued fever. Along with the lead there were usually given a few grains of the compound powder of ipecacuan; sometimes with the addition of the powdered squill. The common doses to children have been, according to the severity of the case, a quarter, half, or whole grain, from to eight or ten times a day. In one very severe, and at one time almost hopeless case, so much as four scruples were swallowed within ten days. The child was six years old, and the disease intense general bronchitis, supervening on hooping-cough. No such bad effects succeeded as are too commonly dreaded from the medicinal use of the acetate of lead, though the gums corresponding to the lower incisors exhibited the blue tint pointed out by Dr. Burton, on the fifteenth day from the commencement of the use of the lead, and it is probable that it existed previously to that date, though unobserved. Nor have I hitherto witnessed in any case the dreaded effects of the lead, not even to the extent of causing constipation.

In the chronic mucous and muco-purulent bronchitis, there is no remedy, I firmly believe, (and I have tried a great many,) that possesses nearly the controlling power over the quantity of the secretion, which is displayed by the acetate of lead. I usually give it in a pill containing one or two grains, along with some extract of hyoscyamus and a grain of squill, three or four times a day.

I have thought it of consequence to let the experience which I have had of the properties of this remedy in bronchitis, be known; because it appears that they have nearly or entirely escaped the notice of the generality of practitioners. The only suggestions with which I am acquainted, of the utility of the acetate of lead in bronchial inflammations, besides that to which I have referred, are by Sauvages, in his Nosologia Methodica; by Dr. Reece, in the fifteenth volume of the Medical and Chirurgical Review (both of whom recommend it merely to relieve irritation in hooping cough;) and by Dr. Stokes, in his first volume on Diseases of the Chest, who conjectures that it might be of advantage in certain forms of chronic bronchitis.

BIBLIOGRAPHICAL NOTICES.

Dr. Bryan's Introductory Lecture.[1]

Professor Bryan has adopted the course, which is usual in introductory lectures, of giving the student a sketch of the history of the science, and of some of the distinguished ancients and moderns, who have rendered their names imperishable, by the improvements effected by them, and by their zeal in the prosecution of this branch of the healing art. The exordium will give a favourable specimen of the author's manner.

"During the last year I was honoured by the trustees of this institution with the tender of the chair of the Principles and Practice of Surgery. The responsibility of the station, thus held out, with other important considerations, made it doubtful for some months, whether or not I would be justified in the acceptance of so distinguished a trust. Having, however, conferred with some of my friends, and feeling, I trust, a pardonable enthusiasm in my profession, with a strong desire to see its principles disseminated to an extent commensurate with their importance, I at length consented to leave my now distant home and its pleasant associations, for a time, to assist you in a pursuit at once elevated, honourable, and worthy the exercise of the highest talents. That our end may be obtained, and that the school, the trustees, and the neighbourhood, may be benefited by our meeting together, is the earnest and ardent wish of my heart.

"Our profession has ever stood high in the estimation of mankind, and dates its origin in the remotest antiquity.

"Man, like the beasts that perish, is born in weakness and helplessness, and in the first periods of his existence, is, perhaps one of the *most* helpless and irrational of animals.

"Devoid of that instinct which guides other creatures with unerring certainty, to seek those objects which are useful, and shun those which are hurtful, and as yet endowed with but faint glimmerings of that divine reason which is soon to expand and lead him to heights but little below the angels, he gropes his way in an uncertain twilight, worse perhaps than total darkness, since it serves only to make darkness visible, and causes him to stumble and totter, at a time when other animals are upright and enjoying all the privileges of their existence.

"In addition to this, as soon as his eyes are opened upon the scene around him, he finds innumerable ills and sorrows besetting him on every hand, with but few natural means of defence or redress. Reason now assumes the sceptre, and in proportion to the wants and sufferings of her votary, does she sway her potent skill over the elements of nature. The elements bow to her power; air, earth, fire and water are but implements in her hand, by which she not only guards and protects, but ennobles and refines the favoured creature of her charge.

"But, as in the history of one mind, we find that it does not at once attain its highest degree of perfection, so in the history of nations, or of our race in general, we observe that there has been a gradual growth of knowledge and science up to the present time; and no people or nation can boast of having attained the highest point of improvement of which the human mind is capable. A view of the history and progressive growth of the mind may best be obtained, perhaps, by reference to the history and gradual extension of any one or more of the sciences. These, commencing in the early ages of the world have, from time to time by the aids of reason and observation, slowly but surely advanced to an extent which would baffle any *one* mind, even the most powerful, in the present day, to comprehend and understand.

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[1] An Introductory Lecture to a course on the Principles and Practice of Surgery, delivered in the Vermont Academy of Medicine, March 12, 1840. By James Bryan, M. D., Professor of Surgery in the above Institution, Member of the Philadelphia Medical Society, &c. (Published at the request of the class.) 8vo. pp. 12. Rutland, 1840.

"The short tenure of the life of man has had little or no effect in impeding the growth of knowledge—this, like the mind itself, may be said to be eternal in duration, and unlimited in expansion—and with the power that we have of transmitting it unimpaired from generation to generation, may be said to have grown as rapidly and extended as widely, as if the first cultivators had continued to live and improve it up to the present day.

"There is nothing, perhaps, more appropriate, or better calculated to rouse the young aspirant after knowledge to industry and perseverance in its pursuit, than a view of the history and growth of his favourite science. In this investigation he will find that, although the fact of the *progressive growth* of science will be established, yet, the world's historic page will present to him many inequalities, and some very dark and dreary spots. He will find that the muses have often had to change their seats, and have always fled from turmoil and bloodshed to the retired shades and arcadian groves of their favourite votaries.

"There is little doubt, but that the simple habits and diet of the earlier inhabitants of our earth,

"Their food the fruits, their drink the crystal rill,"

tended to endue them with robust and healthy frames, while their freedom from exciting passions, and all the tumult of more civilized and modern times, exempted them from many diseases which after generations were doomed to suffer. By degrees, however, for mutual protection at first, perhaps, to defend themselves from the prowling wolf or rapacious lion, they congregated together, and submitted themselves to laws for the comfort and good of the whole. With the blessings of peace and personal security, they soon found, however, commingled the seeds of disease and premature death. The former so increased in number, that the fable of Pandora's box became a fit emblem of their situation; hope alone remaining to cheer them amid their sorrows."

Dr. J. M. Warren's Rhinoplastic Operations.[1]

The pamphlet before us contains the details of three cases of Rhinoplastic operations executed by this skilful surgeon—the worthy descendant of one whose surgical reputation is not confined either to New England or to this country. We shall extract the account of his second case, inasmuch as it was performed not after the usual method, but after the strictly Taliacotian—the graft not being obtained, however, from the part mentioned by Hudibras.

"CASE II.—The young man who was the subject of this operation had been affected for fifteen years with a very troublesome disease, which bears many of the marks presented by what has usually been described under that form of lupus, which proves destructive by interstitial absorption. The commencement of this affection was by a spot on the very tip of the nose, which gradually extended, becoming finally of a livid red colour, and having its surface covered by numerous elevations of a tubercular appearance.

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[1] Rhinoplastic Operations, with some remarks on the Autoplastic Methods usually adopted for the restoration of parts lost by accident or disease. By J. Mason Warren, M. D. (Republished from the Boston Medical and Surgical Journal.) 8vo. pp. 28. Boston, 1840.

In his ordinary state of health, and when perfectly quiet, the only sensation in the affected part was that of an uncomfortable heat and itching; but on the slightest derangement of the system, and upon any extraordinary exertion, particularly when engaged in his ordinary occupations, which are those of a farmer, an intense burning and stinging sensation was produced not only in the nose itself, but extending to the surrounding integuments, and this often so insupportable as to oblige him to desist from his work, and have recourse to some cold topical application, in order to gain a temporary relief. He has gone through a great variety of treatment, continued for a number of years, but without the slightest alleviation to his sufferings. A year since he had a caustic application made to the part, which destroyed the skin for the space of one or two lines, and the subjacent cartilage, the greater portion of the disease remaining undisturbed.

"He came to Boston under these circumstances, determined to have the part removed, and the loss of substance supplied by the Taliacotian operation. At this period the nose had a very pinched appearance, the skin being of an intense red towards the tip, and having in its substance a number of hard, tubercular bodies. A slight redness extended over the ala nasi of the right side. In the centre was a depression and loss of substance, where the caustic application had been made.

"He was seen, previous to the operation, by a number of medical gentlemen well informed in the diagnosis of diseases of the skin, and the only name which could be given to this affection was that which has been already stated; though it differed materially from lupus in many particulars, especially in its long-continued freedom from ulceration, the great suffering attending it, and the absence of any affection of the mucous membrane of the nose.

"The operation was performed on the 8th of April, in presence of Dr. Salisbury, Dr. Gordon, Dr. Mifflin, and some other medical gentlemen. The disease, which extended up as far as the nasal bones, was very carefully removed, and the cartilages below, not destroyed by the caustic, found to be in a perfectly healthy state.

"The dimensions of the flap necessary to supply this loss of substance were now carefully taken, and marked out on the fore-arm. The traces were made on the radial side of the left arm, about two inches from the styloid process of the radius, and extended over to the space midway between the bones of the fore arm. This flap was dissected up, including, with the skin, the subcutaneous cellular membrane, and was secured in its new situation, in contact with the face, by means of five points of the interrupted suture, the arm being firmly fixed in this position by appropriate bandages. An elastic tube was given to the patient, to use whenever he required to take nourishment—the mouth being so covered up as to prevent food being directly introduced into it. He was placed in bed, and supported in a sitting posture by means of a common bed-chair.

"I saw him in the evening, and found him much less disturbed than could have been expected, considering the very restrained position which it was necessary for him to maintain.

"On the following day, the 9th, there was some appearance of erysipelatous inflammation on the bridge of the nose; he had been pretty quiet, and had slept a little, but required constant watching to prevent him from slipping down and doubling himself up in the bed, to which there was a constant tendency. He complained much of a want of solid support to the elbow, and for this purpose a wooden apparatus was constructed and placed across the bed, which served as a firm resting place for the arm, and enabled him to maintain more easily the proper position. The pulse was 60, and throughout the whole period of his confinement it remained below the ordinary standard. On the 10th he complained less of his arm, but was exceedingly restless. During the day he was removed to an easy chair, and the change afforded great relief.

"The state of things varied little from that already described until the 5th day, the period appointed for separating the connection between the arm and face. On this day the base of the flap was divided, and a perfect adhesion was perceived to have taken place between the parts which had been placed in apposition.

"The wound in the arm was dressed, and a small portion of the skin which projected bound down in its place by adhesive straps. The irregular portions of skin being removed, a slight compression was exercised on the edges around the nostrils, by means of small strips of adhesive plaster.

"The arm, on being relieved from its confinement, was at first somewhat stiff, but not so painful as might have been expected, and what was not a little curious, obstinately refused to be raised up again to the position it had so long unwillingly occupied. This, in a great measure, arose from a loss of power in the flexor muscles, from want of exercise of their functions; in the course of a few days, however, it regained its healthy state of feeling and motion.

"By the 20th of April the newly transplanted skin had contracted to nearly the natural size, the line of union with the skin of the nose was perfectly lineal, all the abrupt and useless portions of skin on the lower edge of the nose had sloughed off, leaving a perfectly even and rounded edge to the nostrils.

"On the 23d I was surprised, on removing the green cot which covered the dressings, to find that the whole cuticle of the restored part had peeled off, leaving the surface quite raw and covered by the green colouring matter of the silk. This at first seemed a circumstance destined to embarrass the case and prolong the period of recovery, but in its termination proved of material benefit; a slight suppuration commenced, which brought down the skin to a natural thickness, and rounded off, in the most perfect manner, every inequality on its surface, and seemed also to melt the skin into the adjacent integuments so as almost to destroy the traces of the transverse line of union. A new cuticle rapidly formed, and by the end of the month he was quite well, and was presented at one of the meetings of the Society for Medical Improvement. The newly restored part still remains somewhat wanting in colour, but in all probability by exposure to air and sun, it will soon assume the appearance of the surrounding integuments. Even now it requires that attention should be particularly directed to the part, to show that any operation has ever been performed."

"Shortly after the above was written, the patient having exposed himself to the sun during a walk out of town, experienced considerable itching in the right ala of the nose, where, it will be remembered, there was a slight redness remaining. He came to me, very desirous to have the skin of this part at once removed, as he greatly feared that he might be troubled with it hereafter. He was also anxious that the experiment should be tried of cutting a piece of skin from the arm and immediately placing it in the wound to supply the loss of substance. Although I did not consider this part of the operation necessary, as the wound, in all probability, would have filled up by the granulating process, I yielded to his desire and made the attempt. The skin covering the ala nasi was removed so as to leave no appearance of redness remaining, and a piece of skin being immediately dissected from the fore-arm, was confined in the wound by means of lint moistened in blood, which answered a much better purpose than the common adhesive plaster.

"On removing the dressing, at the end of four days, a perfect union was found to have taken place."

MISCELLANEOUS NOTICES.

Connecticut Medical Society.—At the last meeting of the society held on the 13th of May, 1840, Dr. Silas Fuller was elected *President*, Dr. E. Middlebrook, *Vice President;* Dr. Archibald Welch, *Secretary*, and Dr. Luther Ticknor, *Treasurer.*

Louisville Medical Institute.—The annual catalogue gives the names and addresses of 204 students, who attended this institution during the last session. At the commencement, the degree of Doctor of Medicine was conferred on 39 gentlemen; after which a "few words of impressive exhortation" were given to the graduates by Judge Rowan, President of the Board of Managers; this was followed by a more extended "Doctorate Address" from Professor Drake.

In press, and shortly will be published—" History of Embalming, and of Preparations in Anatomy, Pathology, and Natural History, including an Account of a New Process of Embalming. By I. N. Gannal, Paris, 1838. *Translated from the French, with notes and additions, by R. Harlan, M. D. Philadelphia,* 1840.

This work contains valuable and interesting matter both for the general reader and medical student.

To a general history of the various methods adopted by different nations, for embalming the bodies of animals, is added a detailed account of anatomical preparations and injections both in a dried and fluid state. The information offered in these pages could only be obtained by referring to the works of numerous authors, some of them very expensive, and others not to be had in this country at all.

A personal acquaintance with Mr. Gannal, and a careful examination of the curious objects contained in his museum, preserved by the new process, enables the translator, to estimate at their true value, the extent and application of the discovery.

The original work consists of an octavo of 349 pages, and costs in Paris one dollar. The translation, with additions, will be sold at $1 25.

BOOKS RECEIVED.

From Dr. Welch.—Proceedings of the President and Fellows of the Connecticut Medical Society, in convention, May, 1840, with a list of the members of the society. 8vo. pp. 12. Hartford, 1840.

From Mr. Mercer, Librarian.—Annual Catalogue of the Officers, Students and Graduates of the Medical Institute of Louisville, for 1839–40. 8vo. pp. 16. Louisville, 1840.

From some other source.—The same.

From the Author.—Rhinoplastic Operations, &c. By J. Mason Warren, M. D. (See Bibliographical Notices.)

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Art. I.—CONTRIBUTIONS TO THORACIC PATHOLOGY.

BY G. W. BOERSTLER, M. D., OF LANCASTER, OHIO.

Lancaster, June 3, 1840.

I was requested a few months ago, by Doct. Har, a very intelligent young practitioner, to visit Mr. Locker, more on account of some "anomalous symptoms" than the apparent illness of the man. Locker, aged 27, strong and athletic, never having been sick, whilst engaged in the vocation of clearing his farm, was suddenly seized with violent pain in his left side—he retired to his "log cabin," and in a few moments so violent a fit of suffocation came on as to threaten rapid extinction of life. Doct. Har was sent for, and described to me the patient's state as follows:—great and alarming dyspnœa—skin cold and shriveled—profuse leakage from the surface, with a circulation slow but almost imperceptible. The exhibition of stimulants internally and externally alleviated the danger for the time. The next day the Doctor found the left chest dull on percussion, and heard distinctly the dropping of liquid upon change of position. Locker informed the Doctor that when seized in his field he heard something crack in his chest, and then felt the trickling of fluid. On my visit four days after his seizure, we found the integuments over the anterior surface of the left chest œdematous, extending to the neck—the veins of the skin full and turgid—left side one inch larger than right—intercostal spaces not obliterated—percussion dull over left chest throughout the infra-mammary region, anterior, lateral and posterior—upper portion clear and strongly manifesting the existence of air—the line of demarcation between the difference of resonance most clearly defined by the nipple. On changing the patient to the left side the fluid was distinctly heard by all in the room, indeed it could be heard four feet from the bed, giving precisely the sound of water poured out of a bottle—heart occupying the right cavity immediately under the mamma—its contractions undisturbed—first and second sounds clearly heard. The left lung above the mamma giving the morbidly clear sound of pneumothorax—vesicular murmur in this portion audible—bronchial râle absent. In all the region below the mamma nullity of respiration—cough and voice slightly metallic. Right chest—clavicular region—bronchial râle—vesicular murmur distinct—respiration somewhat puerile: infra-mammary region, vesicular murmur very inaudible—slight sibilant sound. Here we have all the physical signs of a triple lesion—the pneumothorax unequivocal and the effusion palpable—yet this man had no premonitions of disease—up to the morning of the attack he was in good health, and then only complained of a feeling of weakness until his seizure in the afternoon.

The treatment instituted and continued was hydragogue cathartics—strict diet and perfect quietude—the metal with squills was finally given until his gums were touched; in four weeks he recovered—the heart is in situ—lungs resonant, and health perfect. I full well know that recovery from pneumothorax with empyema is questioned, and the chances are infinitely against it; but this case would show the possibility.

G. W. BOERSTLER.

ART. II.—NOTES ON THE EFFECTS OF IODINE, AS A REMEDY FOR CUTANEOUS ERUPTIONS.

BY DR. KENNEDY, OF ASHBY DE-LA-ZOUCH.[1]

In many cases, most of them old both in standing and treatment, I have found the iodine a most efficacious remedy for those disorders of the excernent system which affect the skin, especially the vesicular and pustulous kinds. Such being my experience, I feel desirous of having the practice tested under the observation of others, with a view to its being rendered more extensively useful.

Sometimes, in mild cases and untainted constitutions, the iodine may be used internally without assistance; but, on all occasions, its external application requires to be accompanied by a course of medicines capable of acting on the skin, bowels, and kidneys, so as to improve their functions by its salutary effects.

As the nosology of these diseases must be familiarly known, it will be sufficient here to denote in a simple enumeration such of them as have yielded to the iodine under my instructions. These, then, in Dr. Good's nomenclature, are—

Exormia lichen.—For such of the lichenous rashes as prevail in this climate, the iodine should be exhibited internally with alteratives; and externally, in a tepid or warm solution.

Ex. prurigo.—For the pruriginous rashes, the external iodinated applications should possess considerable energy, and be often applied; with the internal remedies, a proportion of henbane, hemlock, or other anodyne, may be combined.

Lepidosis pityriasis.—For the dandriffs and branny scales, the iodinated lotions must be regulated in strength according to the patient's age: the solution of magnesia, with carminatives, will conduce to their efficiency.

Lep. psoriasis.—The dry scales require frequent ablutions with the remedy in a vigorous form, and its powers may be assisted by a general warm bath in saline mineral water, artificially strengthened with an iodinated impregnation.

Ecphlysis pompholyx.—The waterblebs, particularly when large, yield more readily when friction and generous tonics accompany the topical applications.

Ecph. herpes.—For shingles, ringworm, and the tettery vesicles, the iodine, both in solution and ointment, applied actively, will be materially assisted by the occasional interchange of poultices and emollient embrocations, for the removal of crusts.

Ecph. rhypia.—Blains are best prevented from degenerating into sordid or gangrenous ulcers by frequent gentle excitement of the parts with iodine, and this must be carefully supported by an energetic constitutional treatment.

Ecph. eczema.—Heat-spots, with their clustering vesicles, resist the iodine less obstinately when it is attended by a course of cooling alteratives, and a weekly warm bath in mineral water, wherein the chlorides predominate.

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[1] Lond. Med. Gaz., May 8, 1840, p. 260.

Ecpyesis impetigo.—All the running scalls have yielded to the iodinated treatment, and this proves most successful when the external applications are very frequent, but so modified as to stimulate the pustules without inducing excessive irritation; in these affections, the constitutional alterants should be as energetic as the system will admit.

Ecpy. porrigo.—The various scabby scalls require the strongest topical applications of iodine freely and assiduously repeated, with such a systematic internal use of the medicine as to promote its diffusion through the circulating fluids; for ascertaining this effect, the urine may be submitted to suitable tests.

Ecpy. ecthyma.—For the papulous scalls, the local applications must be adapted to the irritability of the system; but the iodine may be administered in free combination with tonic alteratives, so as to purify and invigorate the constitution.

Ecpy. scabies.—For the itches, in all their filthy forms, the iodine will be found an active and almost certain specific; it kills the parasite which originates the disease: the milder cases will yield to an iodinated lotion frequently applied, at the temperature most agreeable to the patient's feelings.

Malis, the cutaneous "invermination."—For the most troublesome kind of pedicular disease, the undiluted tincture of iodine constitutes a powerful and certain, but not disagreeable remedy; it should be continued for some time after the animalcules have disappeared, so as to insure the destruction of their eggs.

Four forms of iodinated medicine—Tinctura Iodinii Composita, Unguentum iodinii compositum, potassii iodidum, and liquor potassii compositus—were employed in treating the cutaneous affections here specified; the two former, as external applications; the two latter, internally as alteratives. The tincture may be applied to the worst parts in succession, in a concentrated or diluted state, by anointing them with it on a feather or hair pencil thrice in the day, or oftener, as indicated; and at bed-time they should be carefully smeared with the ointment, its proportion being regulated by their tenderness and extent. In the morning there will be advantage in gently washing them with tepid water and soap, before penciling them with the tincture; and at night, about twice in the week, they may be covered over the ointment, with a common emollient poultice; this removes the incrustations on their becoming firm, and soothes the sores when they happen to be congested and painful.

For an alterative medicine, the iodide of potassium or its compound solution may be administered twice in the day, in a bitter or other vehicle, with the aperients always at night. With these, the disulphate of quina or some preparation of iron, and occasionally, though seldom, the blue pill or calomel, with ipecacuan or other diaphoretic, may be exhibited in different combinations. At this place, and without impropriety, the question may be raised as regards the properties and effects here ascribed to iodinated medicine; may they not belong more properly to the other active remedies simultaneously administered? Without the iodine, however, these do not prove equally efficient; and, moreover, their results are uncertain, generally imperfect, often unprofitable, even when associated with the usual topical applications.

There is this advantage in the exhibition of iodine for the before-mentioned diseases, that, when the constitution remains sound or little impaired, with the alimentary system healthy, a free external application of the medicine will effect a cure, without assistance from other remedies. Although injurious effects have sometimes, though not often, supervened during the administration of iodine, yet, on such occasions, the inconvenience or suffering should rather be ascribed to an indiscriminate use of the drug, and to the neglect of guarding patients from the liabilities of peculiar constitutions. Iodinated medicines have been liberally prescribed by me, in hundreds of cases; nevertheless, not more than one instance of unfavourable symptoms has occurred, and these happened to a young hysterical female while being treated for a bronchocele or "full neck." She was naturally endowed with much irritability of the nervous system; and this, by her mismanagement of the remedies, was rendered the source of distressing muscular jerkings in the heart, face, and extremities.

Except on very delicate surfaces, or where the skin is abraded, the iodine excites only a transient smarting, and this very seldom becomes severe: should the pain grow intense, as a casual exception, the parts should be carefully fomented with warm water, which will mitigate the symptoms, by diluting or partially removing the medicine. Usually the iodine produces dry scales or crusts, without corrosion of textures. On inspecting the parts subjected to its action, the observer will perceive, with the assistance of his microscope, the impossibility of their being able to propagate the disease by contagion. If their morbid state is caused by a palpable substance, this will be destroyed; if it is an impalpable essence, its evolution will be counteracted by the topical iodinated applications.

When ringworm, the scalls, and other "outbreaks" on the head, are being treated, the hair should be constantly kept as short as possible, by cutting it frequently with thin bladed scissors: in many respects, this method is preferable to that of shaving the parts with a razor. Hair and organic textures get a yellow tinge from the action of iodine; but after its discontinuance, they soon and completely recover their natural colour.

There is good reason, from extensive observation and analogy, for concluding that, under suitable modifications, the iodine will prove an effectual remedy for nearly all the cutaneous disorders, particularly those which derive their local source and support from animalcular depredations. At the same time, every attention is essentially requisite, that proper internal appliances be instituted, with the twofold object of preventing a recession of the superficial malady to a deep-seated structure, and of sustaining the functions of vital organs in a state of vigorous activity.

Without adducing evidence in support of the statement, on the present occasion, my belief is, that most of the vesicular and pustulous eruptions on the skin, are produced and propagated by the "invermination" and incubation of animalcules, derived from the atmosphere and disseminated by contagion. My suggestion is, that patience and attentive observation be exercised in endeavouring, with iodinated medicine, to secure the extirpation of these parasites and their eggs from their burrows in the cutaneous structure; and my hope is, that, at no distant period, these detestable intruders will be detected by the ingenuity and perseverance of pathologists experienced in the processes of microscopical investigation.

ART. III.—EXSTROPHY OF THE BLADDER.

BY JOSEPH CURTIS.[1]

[The following case of monstrosity by defect is exactly like the two cases referred to in the first volume of the "Intelligencer," which are still in Philadelphia. We are persuaded that the malformation is of more frequent occurrence than is generally imagined. All the cases, it will be observed, are strikingly alike. Mr. Curtis is evidently not aware, that the case he has described is one of Exstrophy of the Bladder, for he has entitled it "Congenital deficiency of the urinary bladder; partial nonclosure of the linea alba; with epispadias."—ED.]

Sir—Seeing in the Lancet of last week the account of a case of congenital deficiency of the urinary bladder, I am induced to send you the following statement of a similar defect:—

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[1] London Lancet, May 9, 1840, p. 230.

January 27, 1840, Mr. Welchman, my assistant, attended a young woman during her confinement with her first child. The infant appeared healthy, but at the lower part of the abdomen was a tumour, which presented an irregular lobulated appearance; it was covered with a mucous membrane, and near its centre were two depressions, from which the urine oozed. These were probably the mouths of the ureters. The penis was at first somewhat longer than usual, but has since, as well as the tumour, much diminished in size. The corpus cavernosum and glans penis are well formed, but there is no prepuce. Along the dorsum of the organ is a groove having the appearance of the urethra, slit open, and extending the whole length of the penis, but there is no meatus. The scrotum and testicles are natural. The child appeared from irritation to waste for the first month, but by attention has recovered, and is now doing well.

JOSEPH CURTIS.

BIBLIOGRAPHICAL NOTICES.

Paine's Medical and Physiological Commentaries.[1]

In the present period of stagnation of literature—not medical only, but general—it is consolatory to see any one have the hardihood to publish two handsome and extensive volumes like those before us. The circumstance exhibits, on the part of the author and the publishers, a confidence, which we hope will not be disappointed, and which we can confidently say, after a perusal of several portions of the interesting contents of the volumes—ought not to be so.

The work consists of a series of essays respectively entitled, 1. The vital powers; 2. Philosophy of the operation of loss of blood; 3. The humoral pathology:—these constitute the first volume. The second is composed of six essays. 1. Philosophy of animal heat; 2. Philosophy of digestion; 3. Theories of inflammation; 4. Philosophy of venous congestion; 5. Comparative merits of the Hippocratic and anatomical schools; and 6. On the principal writings of P. Ch. A. Louis, M. D.

It may be said, that many of these subjects are not of a *practical* nature; and to those who regard the mere pouring of drugs, of which they know little, into a body of which they perhaps know less, this may be the fact. We trust, however, that at the present day, there are few such. Some there are, who doubt the utility of pathology, laugh at auscultation and percussion, and consider that no improvements have occurred in medicine of late years—because they have not instituted, or are ignorant of them. Such persons, likewise, may regard the dissertations before us as of but little value; but to the large mass of physicians of the day, who are anxious to improve their profession in the only way in which it can be legitimately and signally improved—that is by a proper attention to physiological, pathological and therapeutical principles, we can recommend them as essays replete with information, the perusal of which cannot fail to expand the mind and to lead to trains of thought pregnant with benefit to the professional reader himself, and, through him, to the community.

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[1] Medical and Physiological Commentaries. By Martyn Paine, M. D., A. M. In two volumes, pp. 716. 815. New York, 1840.

On many of the subjects, our views are by no means in accordance with those of Dr. Paine, but his essays have not been the less welcome on that account. He is liberal, well read; argumentative and candid; and his volumes exhibit, that his attention has not been directed merely to medical lore; but that his literary qualifications are ample also.

In his preface, the author remarks, "it may be thought that our articles on the philosophy of the operation of blood-letting, the pathology of venous congestion, and the humoral pathology, are too much extended. But as the two first of these subjects have received no attention from authors, we felt it necessary to illustrate our doctrines by a wide range of observation."

Surely, the intelligent author does not mean to convey the idea, that he is the first to treat of "the philosophy of the operation of blood-letting." We admit, that *ex professo* essays on the subject are rare; yet we had fancied, that we ourselves had added an humble contribution on this subject some years ago, and in a volume, which the author has done us the honour to cite, but which—as respects this topic—has not attracted his attention, (General Therapeutics, p. 396 to 428.) There are likewise other essays to which we could refer him.

Certain of the author's opinions we shall doubtless have occasion to advert to hereafter: in the meantime, we advise all to peruse the work for themselves, which contains a vast fund of information agreeably conveyed.

Marshall on Enlisting, by Ruschenberger.

This interesting work, which is now in course of reprinting in the "Library," is from one of the most experienced of the medical officers in the service of Great Britain, in which he holds a distinguished rank. Prefatory notes will be added by one of the best informed and experienced officers of our own navy—Dr. Ruschenberger—whose additions to the literature of his country are doubtless familiar to our readers, and whose attention has necessarily been much directed to whatever concerns the medical department of the service of which he is one of the ablest supports.

MISCELLANEOUS NOTICES.

New Medical Journal in Boston.—We see, by advertisement, that it is proposed to issue, early this summer, the first number of a monthly journal to be entitled "The New England Journal of Practical Medicine and Surgery." It will consist, as usual, of original articles, critical notices, selected articles, and general intelligence; and it is contemplated, as far as possible, to render available to the profession, through its columns, "the valuable information that may be obtained from the various public institutions in this city (Boston) and vicinity."

The editors are H. G. Wiley, M. D.; and B. E. Cotting, M. D., "who have been promised the co-operation and assistance of many of the leading physicians and surgeons in the city."

We wish this new adventurer in the field of science every success.

On the use of the essential oil of turpentine in the treatment of iritis.—By John Foote, Jun. Esq.[1]—Mr. Foote believes that turpentine acts, in these cases, by inducing irritation in the mucous membrane of the intestinal and urinary canals. He quotes and approves of Mr. Carmichael's formula for its administration.

℞. Olei terebinthinæ rectificati ℥j. vitellum unius ovi; tere simul, et adde gradatim emulsionis amygdalarum ℥iv., syrupi corticis aurantii ℥ij., spiritus lavandulæ compositi ʒiss., olei cinnamomi guttas tres vel quatuor. Misce; sumat cochlearia larga duo ter de die.

In a few cases it has been necessary to increase the quantity of turpentine to an ounce and a half or two ounces in the above mixture, the other ingredients being proportionally diminished, so that a dram and a half or two drams of it may be taken each time; but, in general, when administered to the extent directed in this formula, it has very seldom indeed failed, though extensively tried, and in very urgent cases.

Mr. Foote relates five cases, all of which occurred at the Westminster Ophthalmic Hospital. They tell, more or less, in favour of the medicine. Perhaps the case we shall introduce is as strong that way as any.

Case.—Wm Chalfont, ætat. 18, admitted July 21, 1829, with syphilitic iritis of the eye. He reports himself to have had sores on the penis some time since. He has now a copper coloured eruption (the lichen syphilitica) very plentifully on the back and arms, accompanied with nocturnal pains in his shin bones. He has not had a sore throat, nor has he taken mercury. His eye has been inflamed for three days, and he suffers severe circum-orbital pain, especially at the lower part: vision is also considerably impaired. The iris is much changed in colour, and is immoveable: pupil regular: conjunctiva inflamed: and the vessels of the sclerotic are of a pink colour, and very numerous round the margin of the cornea, forming a beautiful zone, with a white inner circle immediately surrounding the cornea.

℞. Olei terebinthinæ drachmam: capiat æger ter in die.

22d. Has taken his medicine regularly: makes water more frequently, but without any pain: urine high coloured. He suffered much pain in the eye last night, from which he is now quite free. The iris is not so much discoloured, but the vascularity of the conjunctiva and sclerotica is just the same as yesterday. Says the medicine makes him feel sick. Continue.

23d. The circum-orbital pain is as severe as ever, but the inflammation is lessened and vision is improved. He complains of great pain in the glans penis during micturition: urine bloody and turbid. Pergat. Habeat infusum lini ad libitum.

24th. Pain round the eye not diminished: the iris is becoming irregular, and more changed in colour, with small globules of lymph adhering to its surface. He has frequent calls to empty the bladder: urine bloody on voiding it. He suffers extreme pain in the hypogastric region, extending also along the urethra to the glans penis. Let him be cupped to ten ounces from the temple, and continue his medicine.

25th. Would not be cupped, and did not take his medicine yesterday: he sees better, and does not complain of any pain: the vascularity is not so great: the strangury continues severe. Pergat in usu olei terebinthinæ et infusi lini.

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[1] Transactions of Med. Bot. Soc. of London, and Medico-Chirurgical Review, April, 1840, p. 487.

28th. Had a purgative on the 26th. Has not taken the turpentine regularly since the last report: he has not any pain in the eye, and vision is quite restored. The urinary organs continue highly irritated: the eruption is paler. Instilletur gutta solutionis belladonna. Habeat pulveris jalapæ compositi drachmam.

30th. The strangury is lessened: the eye continues free from pain, but the vascularity is not removed: the iris has nearly regained its colour, but is irregular. Let him re-commence the turpentine.

The terebinthina was used for a short time with decided advantage; he again omitted it too soon, and was obliged to resume it. When discharged, the redness had disappeared, the iris had regained its natural colour, and the pupil was regular.

We conceive there can be no doubt that, in ordinary cases of iritis, calomel and opium are the best remedies. But in certain instances their use may be precluded by constitutional peculiarity, or by cachexia, and the knowledge of another remedy, inferior though it may be, is useful. Turpentine appears to be such a medicine. Not comparable, under common circumstances, with mercury, it is still possessed of some degree of efficacy, and may at times be given with advantage.

Prosecution of a patient by her doctor in France.[1]—The following curious case affecting *doctors* was recently decided by the court of cassation, the highest judicial tribunal, we believe, in France. It appears that Professor Mojon of Geneva had in 1833 engaged to give his professional services to the *Baroness Feucheres* and her household, during his entire life, on the express condition that she agreed to assure *à perpetuité* to him, his children, and their descendants in a direct line, an annual sum of 10,000 francs —with the permission to her of at any time annulling it by a payment of 200,000 francs at once.

M. Mojon had in consequence been induced to quit Geneva, and to take up his residence at Paris. The parties continued to fulfil their mutual engagements up to 1837, at which period the *Baroness*, without assigning any reasons, thought proper to *break* with the doctor.

He cited her forthwith before the *Tribunal de Premiere Instance*, who at once decided in his favour. The Baroness thereupon appealed to the *Cour Royale de Paris* against this judgment; but again she failed; not only the judgment of the lower court being confirmed, but all expenses being allowed to Dr. M.

The lady, however, was resolved to try the chance of law once more. So she carried the case before the highest tribunal, in the hope of obtaining the *cassation* or reversal of the verdict. The grounds of this appeal were that the engagement, into which Dr. Mojon had entered, involved a violation of the 1131, 1133, and 1780 articles of the civil code, in which it is expressly laid down, "it is forbidden to any one to contract an obligation by which his independence and liberty are alienated."

The Advocate General, who was employed by Dr. M. as his counsel, very ably argued that such a prohibition could not possibly be shown to extend to such an agreement as that which had been entered into between his client and the defendant. The article 1780, which forbids any one to engage their services for life, is applicable only to workmen and domestics, and certainly not to the members of so honourable a profession as that of medicine.

Again, the article 1781, which lays down the obligations of a *master* in reference to the payment of wages or salary, cannot surely be made to embrace the claims of a physician or surgeon for their professional services: for how can any one, who employs a medical man, be said to be his *master?*

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[1] Gazette Médicale, and Medico-Chirurgical Review, April, 1840, p. 523.

For these and many other similar reasons, the appeal of the Baroness was again rejected; the contract between her and Dr. M. was confirmed; and she was condemned to pay all expenses.

We have heard that the Baroness has subsequently summoned Professor *Mojon pour lui donner les soins assidus qu'exige l'etat de sa santé.*

M. Gendrin's Theory of Menstruation.[1]—The following extract, from the recent systematic work on Practical Medicine, by M. Gendrin, will explain his views as to the cause or nature of the menstrual function.

"The observations, which we have presented to our reader's attention, necessarily lead us to modify very essentially the hitherto received opinions on the subject of generation in women. They tend to establish that, during the whole of that period of life when the capability of conception continues, there is a constantly successive development of vesicles and ovula in the ovaries—that, at each epoch of menstruation, a vesicle having reached the surface of the ovary becomes the seat or focus of a peculiar organic action, in which all the organs of generation partake—and that the result of this action is the rupture of the vesicle and the loss of the non-fecundated ovum, either by ovarian destruction or by uterine expulsion.

"The recent observations by *Valentin*—according so well with, and therefore confirming, our deductions drawn from physiological considerations—have shown that the Graafian vesicles contain or inclose an ovulum, in which are found all the essential parts of a human ovum.

"As we find at the same time in the ovarium vesicles in various degrees of development, we cannot well doubt that they exist there only during a limited time or period, from their origin to their spontaneous rupture, which takes place whenever their increase and that of the ovulum are completed. This rupture takes place regularly, at stated intervals, by an organic action, one result of which is the menstrual secretion."

Dr. *Negrier*, professor of midwifery in the medical school at Angers, has written, we observe, a letter to one of the French periodicals, in which he claims the priority of authorship in respect to the preceding views on menstruation. His words are:—

"The researches of M. Gendrin have led him to believe that the menstrual flux is the result of a periodic and regularly recurring congestion, which takes place every month in the ovaries.

"This doctrine I have taught in my lectures ever since the year 1830, and I have repeatedly shown to my pupils the successive evolutions of the ovarian vesicles from their earliest development to their final rupture, as well as the condition of the uterus at its different phases."

On Arsenic in the bones of the human body.[2]—M. Orfila recently submitted the results of some researches on the above subject to the Royal Academy.

The following is the method by which he has succeeded in detecting the presence of a minute portion of arsenic in human bones, in a natural state.

The bones are to be first calcined, but not by too high a heat, and they are to be carefully preserved from any contact with the fuel employed. The pulverised mass, being previously sifted, is to be treated with *purified* sulphuric acid; the mixture is then to be introduced into Marsh's apparatus. Spots or stains of arsenic, having a brown colour, and a metallic brilliancy, will soon be perceived on the sides of the vessel.

M. Orfila has succeeded in detecting minute portions of arsenic in the bones, not only of the human adult, but also of the sheep, ox, and horse.

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[1] Gazette Médicale, and Medico-Chirurgical Review, April, 1840, p. 515.

[2] London Medico-Chirurgical Review, April, 1840, p. 542.

Hitherto he has never discovered any traces of its existence in any of the soft parts of the animal body.

He seems, however, to believe that there may probably be a very small portion in muscular substance, although hitherto he has quite failed in detecting its traces. Some of the appearances, however, observed during its slow distillation have been not unlike to those which are known to proceed from the presence of arsenic.

On incontinence of urine in children.[1]—*Treatment.*—The late Baron Dupuytren, and also MM. Baudelocque and Guersent have recommended the use of cold shower-bathing as one of the most effectual remedies against this most annoying and frequently most obstinate complaint.

M. Lallemand, of Montpelier, has great confidence in aromatic bitters to which a small portion of brandy has been added, followed by active friction of the loins.

Underwood recommended the use of sea-bathing, of dry cupping, of blisters on the sacrum, and of electricity.

As internal medicines, the Spanish fly and the nux vomica have been unquestionably the most efficacious. The preparation of the latter, which has been most successfully used, is the extract in doses of from half a grain to four grains in the course of the day. The following two cases may be read with interest.

Case I.—A girl, 12 years of age, had been affected from her infancy with incontinence of urine, her general health being unaffected all the time. It would seem that no remedial means had ever been tried.

Dr. Ramaugé, who accidentally saw the girl at a house where he was visiting, recommended her to take one of the following pills, along with a wine glassful of infusion of quassia, three times a day:—

℞. Extracti nucis vomicæ gr. viii.
Oxydi ferri nigri ʒi.
Pulv. quassiæ ʒi.
Syrupi absinthii q. s.
In pilulas xlviij. divide.

A tonic nourishing diet was ordered, and also a glassful of wine two or three times a day. By persevering in this course for a month, the patient was quite relieved from her distressing malady.

The treatment was, however, continued for another month; and at the date of the report there had been no return of the complaint for upwards of a year.

Case. II.—A boy, ten years of age, had long been affected with nocturnal incontinence of urine. During the day he had very frequent calls to urine, the bladder being unable to retain only a very small quantity at a time. He was ordered an infusion of quassia and half a grain of extract of nux vomica in four pills during the course of the day. After three weeks' employment of this regimen, the boy could very sensibly retain his urine a great deal better, the calls being much less frequent. A blister was applied upon the sacrum, and a cold aromatic bath was to be employed twice a week. In the course of a fortnight, the nocturnal incontinence had quite ceased, and the patient continued well for six months.

Closure of the right side of the mouth.[2]—*Operation.*—M. H., aged 22, was admitted, Oct. 22, 1839, under the care of Mr. Liston. About a year ago she was knocked down in a quarrel, and a man jumped upon her with both his feet, causing an extensive wound of the right side of the mouth and upper lip, and a fracture of the jaw. She went to St. Thomas's Hospital; her jaw was put up tight with bandages, and when it was undone the external wound and the right side of the mouth were found united.

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[1] Journal des Connoissances Médicales, and London Medico-Chirurgical Review, April, 1840, p. 542.

[2] London Lancet, May 9, 1840, p. 242.

23d. Mr. Liston removed a triangular piece of skin, forming the cicatrix, from the right side of the mouth, dissecting it off from the mucous membrane of the mouth; this was then divided to the extent of the external wound, and water-dressing was applied until all oozing of blood had ceased. About five hours after the operation the mucous membrane was united to the edges of the skin by three sutures, and being turned out and longer than the external skin, formed at once a prolabium, and prevented the union of the incision.

23d. The sutures have been removed, and the water-dressing applied.

28th. The wound is healing; the mucous membrane of the mouth, which was turned out, has united to the cut edge of the skin, and prevented the internal part of the wound from being again united; the external part of the incision is slightly suppurating.

The patient has been doing well, and was discharged cured some time since.

Dislocation of the Humerus.—Cure of an old dislocation of the humerus by division of the pectoralis major, latissimus dorsi, teres major, and teres minor muscles.—By Professor Dieffenbach.[1]—Herr T——, a large landowner, upwards of thirty years old, had his right shoulder dislocated two years ago by a fall from his horse; the nature of the accident was not at first recognised, and afterwards, though all the usual means were adopted by several surgeons, the bone could not be returned to its place. The patient, therefore, came to Berlin; he was of a gaunt, powerful form, with a pale complexion and but little fat, and his muscles were strong and prominent under the skin. The injured right shoulder was an inch higher than the left; the acromion formed a sharp angle; on the outer side the shoulder was deeply hollowed, and the scapula lay flat. The right arm was thinner than the left, and stood out far from the body. The head of the humerus lay on the anterior side of the chest, close to the clavicle, and two inches from the upper portion of the sternum. The patient had a constant sensation of cold in the limb, and the creeping which he had formerly felt had ceased. The pulse in the right radial artery was rather weaker than that in the left. The limb was useless, and only the hand could perform some slight actions.

By moving the arm in different directions, severe pain was produced in the part where the head lay, surrounded by a thick wall of dense ligament, into which it had worked itself. In drawing the arm outwards from the body, the pectoralis major, latissimus dorsi, teres major, and teres minor became tense with extreme pain. The last three of these muscles felt hard and tense, even when the arm was not drawn outwards. An attempt to reduce such a dislocation without dividing these muscles and the new joint would have been extremely dangerous, and had been found impossible; but (says the professor) I anticipated success from the subcutaneous division of every thing that resisted me.

The patient being placed on the table, with one folded sheet passed under the right axilla, and held by six assistants, another fastened round the right hand and held by six more, and a third round the upper part of the humerus held by three more (in the manner usually adopted by me in old luxations), the two first sets of assistants were ordered to pull against each other. I next bade them make a slowly-increased extension, and then stop;

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[1] Medicinische Zeitung, and Foreign Medical Review, Dec., 1839, and Lond. Lancet, May 9, 1840, p. 250.

I then passed a small scythe-shaped knife through the skin, and divided the most tense portion of the pectoralis major close to its tendon, which yielded with a cracking sound. I then again introduced the knife at the posterior border of the axilla, and divided one after the other the latissimus dorsi, the teres major, and the teres minor. All these muscles gave way with a cracking noise, which was increased by the resonance of the chest. I next passed my knife into three places by the head of the humerus, and divided in a similar manner, under the skin, the dense and hard false ligaments which surrounded the new joint, and, lessening the extension, I loosened the head by a few rotations.

A powerful extension was now again commenced on both sides, and the three assistants behind the patient pulled suddenly, while I conducted the humerus towards the joint into which it slipped on a sudden, without again springing out. One shoulder looked now just like the other. The thorax, the shoulder, and the arm were enveloped with bandages which were soaked with paste, and after a few hours they all became dry and hard, and prevented any motion of the right side.

The bleeding from the wounds, which were not larger than those made in phlebotomy, was at most a few drops. No unpleasant symptoms ensued, and the patient suffered even less than the majority of persons in whom I have reduced old dislocations. On the ninth day I took off the bandage; both shoulders had exactly the same level and form, and there was neither swelling nor pain. The punctures in the axilla had completely healed, and scarcely a trace of them could be found; there was no collection of blood or pus. The arm was already capable of motion, and its actions were far less hindered than they are sometimes after the reduction of a recent dislocation; because in them there is often for a long time a sensitive contraction of the unnaturally stretched muscles, while in this case the division of the resisting muscles and of the newly formed joint not only rendered the reduction possible, but at the same time diminished its after consequences. The limb is now again restored to perfect utility.

M. Müller's results on diabetic blood, obtained by venesection.[1]—Twelve ounces of the blood gave

	oz.	dr.	gr.
Chloride of sodium, ...	0	0	24.5
———— potassium, ...	0	0	13
Sulphate of potash, ...	0	0	9
Carbonate of potash, ...	0	0	17
———— lime, ...	0	0	6.75
———— magnesia, ...	0	0	9
Phosphate of magnesia, ...	0	0	10
Carbonate of soda, ...	0	0	11
Phosphate of soda.	0	0	05
———— iron, ...	0	0	22.25
Sugar, ...	0	1	5
Albumen, ...	1	3	27
Hæmatosin, ...	1	5	24
Liquid fat, ...	0	0	19
Crystallizable fat, ...	0	0	33
Fibrin, ...	0	0	26
Extractive matter, ...	0	0	22.5
Carbonate of lime, ...	0	0	7.5
Water, ...	8	1	33
	12		

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[1] London Lancet, May 9, 1840, p. 253.

Action for Libel.—Syme v. Lizars.[1]—Mr. Syme, who, our readers are probably aware, is Professor of Clinical Surgery in the University of Edinburgh, recently brought an action for libel against Mr. Lizars, Professor of Surgery in the College of Surgeons. The following is the article complained of, and is contained in Lizars' System of Surgery, Part II:—

"In every operation about the anus, however unimportant it may seem, the operator cannot be too careful in averting hemorrhage, as many have died from such neglect. This was the fate, indeed, of a respectable apothecary in this city. Nor is it improper, as an additional warning, here to mention another case, which was under the care of our Professor of Clinical Surgery a few years ago. He operated on a gentleman, for a slight fistula in ano; left the part inadequately defended, and dreadful hemorrhage ensued. The professor was sent for, arrived, groped about in the anus with his knife, *searching for a needle in a hay rick*—I mean, for a blood-vessel to be tied. Meantime, the life of the patient was saved by *deliquium animi;* but to this day the wound remains unhealed, and the unfortunate man a miserable, nervous invalid, from the excessive loss of blood."

The damages were laid at £1000.

The defence consisted in denying that the passage was false, calumnious, or injurious; or that it was written with the intent of imputing want of skill to Mr. Syme, or with a wish to hurt his good name and reputation. It was then admitted, on the part of the defendant, that he had been misinformed as to Mr. Syme being the party who "groped about" for the vessel; because, though sent for, he was not to be found.

The Lord Justice Clerk summed up, giving an opinion in favour of the prosecutor; to whom the jury, after retiring for a few minutes, awarded £50 damages.

Nerves of the upper extremities.—By James Douglas, Lecturer on Anatomy, Glasgow.[2]—One of my students this forenoon was dissecting the superior extremity, and asked me to point out to him the nerve of Wirsberg, as it was not, he said, mentioned in his book. On looking at his book, Quain's Anatomy, it is not so much as mentioned; and, in Harrison's Dublin Dissector, the best manual with which I am acquainted, and which I recommend to all my students for their companion at the dissecting table, it is not described; but the name of the nerves of Wirsberg is applied to the two, or sometimes three branches, which come off from the second, third, and fourth intercostal nerves, at the greatest lateral projection of the ribs, and generally lose themselves on the skin which shuts up the base of the axilla. These are more properly called the intercosto-humeral nerves.

The nerve in question is described by Sir C. Bell, in the second vol. of his Anatomy, p. 574—a book which is not in general very minute in its details, though it has many other valuable qualities. It is there called the nerve of Wirsberg. I forget who gave it the designation of the *cutaneous minor*, by which I am accustomed to demonstrate it.

In the subject looked at to-day, it arises from the lower of the three divisions of the brachial plexus—from the same root as the internal cutaneous and ulnar, internal to which last it lies. It runs down along the inner side of the basilic vein beneath the fascia, perforates it about a hand's breadth above the elbow, and divides into two branches, one of which runs in front of the inner condyle, and the other, rather larger, behind it, and both lose themselves in the skin a little below the elbow. In some subjects I have seen its origin very small from the axillary plexus; and then it derived an additional root from some of the intercosto-humeral nerves.

When writing, at any rate, I may add a remark on a set of muscles said to have been discovered by some German, and noticed in one of the numbers of the Gazette last winter, under the name of *Rotatores dorsi*. I must confess that, when I read it, I disbelieved their existence, from what I knew of the structure of the dorsal spine, where rotation is impossible, on account of the form of the articulating processes of the vertebræ, and on account of the ribs being superadded. Nothing, however, is too absurd for a German periodical.

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[1] Lond. Med. Gaz., May 8, 1840, p. 281.

[2] Lond. Med. Gaz., May 1, 1840, p. 226.

If the *multifidus spinæ* be dissected away with care, its deepest fibres will be seen arising from the lower edge of the arch of one vertebra near its spinous process, and passing obliquely down to be inserted into the root of the transverse process of the one below; but these have no more claim to be considered distinct muscles than the outer fibres of the lower fasciculi of the same muscles have, which pass over one, or sometimes two transverse processes, before being inserted.

Premature labour artificially induced in a Dwarf.—By M. Dubois.[1]—The subject of this case is a dwarf, æt. 23, 3 feet 2 in. 9 l. high, whose father was only 3 feet 6 in., but whose mother was of ordinary size. These, her parents, had six children, of whom three were dwarfs. Two years ago, M. Dubois attended her in her first labour; when he was called in she had then had pains for 48 hours; on the previous evening she had had convulsions, and she lay in a kind of stupor in a *cradle*. The labour appeared in an advanced stage, for the child's head could easily be felt in the hollow of the pelvis; but further than this it could not pass, and the forceps could not be applied. The child was evidently dead, and M. Dubois, therefore, perforated the head, and it passed on to the vulva. Here, however, there was a fresh difficulty, for the vulva was narrow in correspondence with the stature of the individual. Happily, it soon enlarged spontaneously by a rupture which passed backwards and on one side towards one of the ischia, and the labour was terminated. The child, without its brain, weight 5¼ lbs; its length was 7½ inches. The patient went on satisfactorily after the labour, and soon recovered. The state of stupor in which she was at the time of the accouchement almost prevented her feeling the pains.

Last year, she again became pregnant; but this time, (says M. D.) in conformity with my recommendation, she came to announce it to me early. She had, when she came to me, been pregnant since about last June; and I found by the examination of the pelvis, that its diameters were not proportioned to the presumed dimensions of the fœtal head, for the pubo-coccygeal was not more than three inches.

Admitted to the obstetric clinique, we found on examination, that the uterus was but little developed and the fœtus small. In February, she was in the eighth month of her pregnancy; and the abdomen then enlarged considerably in the space of a few days, so as to cause some fear that the accouchement might be rendered difficult by a superabundance of liquor amnii. Having decided on inducing premature labour, I had to choose between rupture of the membranes, dilatation of the neck of the uterus with prepared sponge, and the administration of the ergot; I decided on the two last. The patient having taken a bath, was placed on the edge of the bed, and a speculum was introduced; a portion of prepared sponge, an inch long, and cut in the form of a cone, was placed in the neck of the uterus, and over it another moist sponge to keep it in its place; they were fixed by a thread, and six grains of ergot of rye were administered. The patient was then put to bed. Four hours after, she felt strong pains, and was in active labour; it appeared indeed to be going on so rapidly, that I withdrew the sponge. At nine in the evening, there was a full protrusion of the membranes, and I ruptured them and found that the buttocks presented. The fingers were applied on the haunches to facilitate their exit; the head remained at the superior aperture; drawing downwards a few times, and movements of flexion, brought it into the hollow; and at last it came out entirely. The child breathed immediately; it was 15 inches long; the biparietal diameter was 3 inches; the occipito-frontal 3 inches and 2 lines: it weighed 3 lbs. 12 oz. The size of the child was therefore small: yet it was not a dwarf. The mother nourished it for a few days, but the secretion of milk soon ceased; on the twentieth day the woman was perfectly recovered.

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[1] **Gazette Médicale, Mars 14, 1840, and Lond. Med. Gaz., May 1, 1840, p. 237.**

M. Dubois adds some details as a supplement to this history. The father of the child is a man of ordinary stature; he is about 5 feet 7 inches high. The first sexual connections were very painful: but the periods of pregnancy were easy.

Nothing is more rare than the accouchement of dwarfs: for there is but a single authentic fact, which is related in the work of Geoffrey Saint-Hilaire. The woman, who was to have been confined at London, died. It is to be observed, that the child of this woman is not a dwarf: dwarfs are born much smaller. The mother herself was born extremely small; she passed all her infancy on a table seated on a cushion. There is but one exception to this rule, an English dwarf exhibited in 1770; he was born of the usual size, but at the age of one year his growth was suddenly arrested.

I have, of course, no need to justify the measure which I adopted in this case. It cannot be compared with an operation, of which the result would be to sacrifice the mother or the child, or both at once. More than two hundred cases that have now come to my knowledge, prove that the plan I adopted is not so serious a thing as might be imagined; half the infants, and an immense majority of the mothers, have survived it. Still, the cæsarean operation is certainly not in all cases to be superseded by the production of premature labour; each of these operations, as well as the division of the symphysis, and embryotomy, has its own special indications.

Successful treatment of a congenital umbilical hernia.—By Professor Cederschjold, of Stockholm.[1]—The umbilical ring was open in this case, and had probably a diameter at least of an inch, through which the intestines, covered only by peritoneum, protruded, and formed a mass as large as a fist. The umbilical cord came out from the most prominent part of the tumour. The protruded intestines could not by gentle pressure be returned into the abdominal cavity through the ring, and it was by chance discovered that they were full of meconium, which the child had not yet evacuated. A laxative medicine was therefore ordered to be introduced, before the intestines were replaced. Five teaspoonfuls of castor oil were given before the bowels acted; the hernia then became soft; and by placing the child on its back, its reduction was easily accomplished. The sac, consisting of the peritoneum only, being emptied, a ligature was tied close to the umbilicus, which falling off after 14 days, the navel was found completely healed, and just like that of a healthy child.

Medical department of Kemper College, St. Louis.—A new school of medicine has been instituted at St. Louis, which will go into operation in the fall. The following gentlemen constitute the Faculty.

Joseph N. M'Dowell, M. D., (late Professor of Special and Surgical Anatomy in the Cincinnati College,) Professor of Anatomy and Surgery; J. W. Hall, M. D., (late of Kentucky,) Professor of Theory and Practice of Medicine; Hiram A. Prout, M. D., (late Professor of Chemistry and Botany in Lagrange College, Ala.,) Professor of Materia Medica and Medical

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[1] Schmidt's Jahrbucher, and Lond. Med. Gaz., May 1, 1840, p. 238.

Botany; John S. Moore, M. D., (late of Tennessee,) Professor of the Institutes of Medicine and Obstetrics; John De Wolf, M. D., (late Professor of Berkshire Medical School,) Professor of Chemistry and Pharmacy.

By order of the Board,

Geo. A. Underhill, *Secretary.*

Magendie on the physical phenomena of life.—A translation of this interesting work is in course of preparation for the "Library," by Dr. Benjamin Dennis, of Cincinnati.

Simulation of disease.[1]—Some diseases or disabilities, such as deafness stammering, are much more easily feigned than others, and, consequently, the imposture is more difficult to detect. In all diseases of which the symptoms are obscure, periodic, or intermitting and uncertain, much care should be taken not to come to a wrong conclusion. "Melancholy instances," says Mr. Malcolmson, "have come to my knowledge where men have died in making exertion above their strength, after having been looked on as malingerers." Some diseases are not indicated by a change of the pulse, or by any remarkable alteration of the body, or evident derangement of its functions; and it ought to be recollected, that patients suffering under real disease are apt sometimes to exaggerate their lesions. A malingerer is constantly prone to overact his part; but the inventing of symptoms is a much more difficult operation than frankly to state the feelings. Two soldiers were transferred to the hospital in Dublin, to be discharged, in consequence of alleged incurable disabilities. The designation of a disease was affixed to each name; but the appearance of the men indicated little, if any, derangement of the body. The medical officer made them stand up together, and requested one of them to describe his complaint, which he did very minutely. By his account, it appeared that he suffered under disease from the head to the foot. The other man was then asked, "what is the matter with you?"—"*The same as this man,*" was his reply. He was evidently not prepared with a set of symptoms, and, without perceiving the trap, instinctively availed himself of the ingenuity of his fellow impostor. They were sent back to the corps; "but I have no doubt," says Mr. Marshall, relating to the anecdote, "that each of them succeeded eventually in *working out* a discharge."

BOOKS RECEIVED.

From the Author.—Medical and Physiological Commentaries, by Martyn Paine, M. D., A. M. 2 vols. 8vo. pp. 716, 814. New York, 1840. (See Bibliographical Notices.)

From the Publishers.—Treatise on the Physiological and Moral Management of Infancy. By Andrew Combe, M. D., Fellow of the Royal College of Physicians of Edinburgh, Physician extraordinary in Scotland to the Queen, and Consulting Physician to the King and Queen of the Belgians. With notes and a supplementary chapter. By John Bell, M. D., Lecturer on the Institutes of Medicine and Medical Jurisprudence, Fellow of the College of Physicians of Philadelphia, and Member of the American Philosophical Society, &c. 12mo. pp. 307. Philadelphia, 1840.

From the Author.—Psychology; or a view of the Human Soul; including Anthropology, being the substance of a course of lectures delivered to the junior class, Marshall College, Pennsylvania. By Frederick A. Rauch. 8vo. pp. 388. New York, 1840.

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[1] London Lancet, March 7, 1840, p. 902.

THE

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ART. I.—COAGULATION OF THE BLOOD FIFTEEN HOURS AFTER DEATH.

BY THE EDITOR.

From a late number of the Bulletin of the "Proceedings of the American Philosophical Society," (No. 12, for May, June and July, 18mo. pp. 216,) we extract the following notice.

> "Dr. Dunglison gave the particulars of a case in which blood that flowed, on dissection, from the arteries of the brain, coagulated fifteen hours after the death of the individual.
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> The patient died after a severe agony, and after an illness of some duration, for which mercury had been administered so as to affect the system freely. On opening the head the arteries of the brain were found turgid with blood, and on removing the brain the blood flowed from them and coagulated.
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> Dr. Dunglison made some remarks on the singularity of this phenomenon, and its relations to physiology and medical jurisprudence, and stated that it completely overthrew the views of those who believe that the blood is either possessed of a vital influence or receives some influence from the living vessels that contain it, which maintains its fluidity, and that so soon as it is removed from these influences it coagulates or dies. In this case the blood remained fluid, and coagulation took place fifteen hours after the total cessation of respiration and circulation, and after the blood had become cold; circumstances showing that the phenomenon is wholly physical in its nature."

Of this case we had not an opportunity of seeing any thing until after death; nor was an accurate history of it attainable. The patient had been delivered about a month previously, and had suffered under symptoms, as it was believed, of peritonitis, for which she was bled generally and locally, and had taken small doses of calomel, which produced severe salivation with considerable ulceration of the gums. Two or three days before her dissolution she was affected with diarrhœa, with heat and dryness of skin, quick and feeble pulse, and considerable stupor, passing her urine and fæces involuntarily. Under these symptoms she gradually sank.

It was especially in consequence of a very offensive discharge from one of the ears, that we suggested the propriety of examining the head with the view of discovering whether the patient had died of cerebral otirrhœa, when the phenomena above described were noticed, but there was no evidence of encephalic inflammation originating in the disease of the ear.

Although the fact, that blood may remain fluid in the vessels for a considerable time after death, and coagulate when removed from them, has been noticed before,[1] it does not appear to have given rise to any physiological deductions of moment: yet it is replete with interest to the physiological inquirer.

The circumstance, as respects the veins, was noticed in this city during the yellow fever of 1820, and has been recorded by Professor Jackson, of the University of Pennsylvania. He observes, "The veins of the omentum, mesentery, and, in fact, the whole system of the vena portæ, were always distended with fluid blood. It was at first supposed, that the blood, being thus fluid, was in the dissolved state so often mentioned by writers. But Dr. Hewson, wishing to make some experiments, collected portions of it in cups. In the course of 10 or 15 minutes it was firmly coagulated, and this was found in subsequent observations invariably to occur."[2]

It is interesting to remark, that in all these cases, we believe, as well as in the one which we observed, mercury had been largely administered, and it may be a topic for farther investigation, whether this peculiarity be in any manner connected with the free use of that or other agents.

ART. II.—A LECTURE ON MONSTROSITIES,

Delivered at the Middlesex Hospital School of Medicine, Feb. 1840.

BY JOHN NORTH, ESQ.

Lecturer on Midwifery, and the Diseases of Women and Children.[3]

GENTLEMEN:—In compliance with my promise and your wish, I proceed to give you in the present lecture a brief, yet, I trust, not an uninteresting sketch of the information that we have derived on the subject of monstrosities, within the last few years, from the labours of the French and German writers, especially of Meckel, Soemmering, Breschet, Serres, and, above all, Geoffroy St. Hilaire. The researches of these distinguished writers have filled up a great blank in medical science. Before their time almost every example of monstrous formation was attributed, not merely by the public, but also by the profession, to a whimsical deviation of nature from her accustomed laws. Such continued to be the prevailing doctrine until the beginning of the 18th century, when better founded and more philosophic views began to be established, and were gradually carried to their present comparative state of perfection, by the talents and labours of the authors whom I have mentioned. I refer particularly to the work of St. Hilaire, entitled "Histoire Générale et Particulière des Anomalies de l'Organisation chez l'Homme et les Animaux."

The phenomena of monstrosities have at all times excited the attention of philosophers. In former days every case of monstrous formation was attributed to the influence of demons, or to the anger of the Deity; and, hence, by the Greek and Roman laws, monsters were condemned to die. Such opinions could, of course, have been entertained only in an age of gross superstition and credulity.

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[1] See J. Davy's Researches, Physiological and Anatomical, vol. 2. p. 190, Lond. 1839, now in course of republication in the Library.

[2] Philadelphia Journal of the Medical and Physical Science, vol. 1. p. 22. 1821.

[3] London Lancet, March 7, 1840, p. 857.

Every example of *monstrosity*, if the term be correctly applied, is congenital. In fact, all those metamorphoses and great physiological phenomena which result in the formation, and in the first evolution—of the different organs, belong to the first periods of infra-uterine life. In the last periods of pregnancy, the fœtus is subject to very slight changes, and suffers but very few deviations from the specific type. It is necessary to bear this in mind, in order to understand completely many of the observations I shall hereafter make.

As I am anxious to compress into a brief space the large mass of facts which have been communicated to us on this subject, I shall pass over one branch of it, on which many hundreds of pages have been written, viz. the *classification* of monsters. For many ages thousands upon thousands of cases of monstrosity were collected, but in order to understand their origin, it was absolutely necessary to know the true laws of the original developement of the various organs of the human subject. It was also necessary that comparative anatomy should be studied in the modern and philosophic manner which has led to such very interesting and curious results as those that we now possess. The establishment of the theory of the frequent arrest and retardation of organic developement has led to sound views and the great progress that has now been made in the subject of monsters, the phenomena having been formerly almost universally attributed to some accidental deviation from the ordinary track of nature. An examination, however, of the original developement shows us that the greater number of monsters are beings whose growth has been arrested, and in whom the organs of the embryo have been retained until birth, and are associated with the fœtal organs.

This arrest of developement is very instructive as to those cases of monstrosity in which there is a deficiency of organs. Secondly, other phenomena arise from excess of developement, in which the organs are larger or more numerous than usual. Thirdly, there are anomalies, which arise neither from deficiency nor excess, but in which the primitive process seems simply perverted, thus changing the direction and situation of different organs.

The laws governing the production of these anomalies must be derived from the general laws or principles of organisation; and the first and most important law is that of the unity of organic composition. The organs of animals are composed of precisely the same materials, are always essentially the same, and are combined according to definite rules. By this law of unity of type in the formation of animals, as shown by Meckel, by Serres, and especially by Geoffroy St. Hilaire, we are enabled to explain the resemblance that is so frequently traced between the *anomalous* formation in one race of animals, and the *natural* form in others. Nothing is more common than to find that the anomalous structure of monstrous formations, in man for example, represents accurately and definitely the natural structure in other animals. According to this law, every animal in whom there has been an arrest of developement, ought to realise, in some of its organs, the condition that is met with among the inferior classes; and such is the case. Again, when there is an excess of developement, then we find the same resemblance between the animals which are the subjects of it, and some beings that are higher in the scale. This is occasionally found, but it is not so common as are examples of the human family resembling lower races, in consequence of deficiency. In the two lectures which I shall give on this subject, I shall refer to many examples illustrative of this law, but a few of them may now be noticed.

Many of the monstrous formations in man, consequent upon an arrest of developement, bear a marked resemblance to different mammalia. For example, the persistance of the tail, the characteristic of mammalia. In the early stages of the human embryo there is a natural prolongation of the os coccygis, which is neither more nor less than a tail, and which is usually removed in the process of developement. Here is a specimen, [exhibiting it] in which this is admirably shown. In the process of embryonic life the tail ought to be removed; but if any circumstance takes place in the early period of utero-gestation, so as to arrest or retard the developement of the embryo, the tail may remain. Here is a six months' fœtus [presenting it] exhibiting a permanent tail. Again; we not uncommonly find, as a specimen of monstrosity in the human subject, a cloaca, from which both the urine and the fæces are expelled; and such is the natural structure in many of the inferior animals. Monstrosity from a fissure in the lips, in consequence of an arrest of developement, is by no means uncommon in man. Here is a specimen. The lips are originally formed from the angles to the centre, and join at the median line; but if an arrest of developement take place, if the lips do not pass to the median line, there will be a chasm. There may be one or two fissures, or the chasm may be of larger or smaller compass, constituting what is improperly termed *hare-lip*. It arises from an arrest of developement, and it represents the natural structure of many of the inferior animals. Again; the uterus may be double (of which there is a specimen before you) in the human subject, but this also is the natural structure of many animals. There may be an imperfect state of the convolutions of the brain, representing, again, the structure of inferior animals. We often meet in the human subject with a bifurcation of the glans penis, or the clitoris; two vaginæ are not very uncommon. These are monstrosities arising from an arrest of developement, and they represent the natural structure of many animals. Imperforation of the vulva is not unfrequent; the sexual organs are sometimes deficient, and occasionally there is an imperfect developement of the eyes.

In another genus of monsters the limbs are deficient, the hands and feet appearing to exist alone, and to be inserted immediately into the trunk of the body, resembling seals and cetacea. An example of this existed in a Miss Biffin, who was exhibited some years ago in London and other parts of the kingdom. In her case there was an arrest of developement, but in many of the cetacea this is the natural formation, thus furnishing another illustration of the general law. Here [showing it] is an example of monstrosity exactly resembling Miss Biffin. The hands and feet are closely united, you see, to the body. No limbs are developed. Sometimes there is a deficiency in the arch of the palate, which is common in fish; frequently the diaphragm is imperfectly developed, as in oviparous animals; at other times we find as a specimen of monstrosity a communication between the different cavities of the heart, such as exists in reptiles. The absence of the brain and spinal marrow is not uncommon in the human subject. Very frequently the cerebral system is composed only of ganglia and nervous filaments, as in the case of many of the articulated animals.

The cases are much more rare in which inferior animals resemble the higher from an excess of developement. Geoffroy St. Hilaire mentions cases in the carnivorous tribe in which there was an excess of developement, and the tail had entirely disappeared. He has seen other cases in which the spinal marrow ascended as high in the vertebral canal as in man. All this is, physiologically, extremely curious.

The fact of the natural formation of the inferior tribes existing in monstrosity in man, clearly proves—and this proof has only been afforded to us in recent times—that monstrosity is not, as was once believed, a disorder arising from the blind freaks of nature, but that it is governed by constant and precise laws, and is capable of being submitted to a regular and scientific classification, and this classification has been effected in a very elaborate manner by Geoffroy St. Hilaire.

Another law, a law very closely connected indeed with monstrosity, and one of the fundamental principles of embryology, is this, that no organs originally pre-exist in the ovum. All the organs are formed at various parts of the growth of the ovum. At first each organ is extremely minute, extremely simple; and each afterwards passes through a series of changes in the process of developement. When the different organs have arrived at their permanent and natural state, some of them have passed through a greater number of changes than others, and have deviated from their original conformation more than others. In some, the changes are few and unimportant; in others, they are numerous and important. This is the normal, but not the invariable law of developement, for an organ may stop beneath the ordinary degree of developement, or be entirely abortive; or, on the contrary, it may exceed it, and thus arise the two great classes of monsters—one from arrest of developement, the other from its excess.

Now, of course, the admission of the law of the non pre-existence of organs in the germ is fatal to the old doctrine of original monstrosity before fecundation. The ancient doctrine taught that monstrosity arose before fecundation had taken place, from some original malformation of the germ. This position is now entirely abandoned, not upon any hypothetical grounds, but, from the immense number of facts which have been collected in opposition to it. It is true that Meckel has endeavoured to revive this doctrine, but only with a view to escape from difficulties and to account for certain cases of monstrosity, which it is safer in the present state of science to confess are utterly incapable of explanation. According to the law which admits the formation and not the evolution or unfolding, as it were, of organs, monsters from arrest of developement may be considered as permanent embryos, in some respects. We see at the end of their intra-uterine life some of the organs in the simple state in which they were at first formed.

A third law is that of eccentric developement. According to the doctrine of Haller and all the physiologists of the 18th century, every vessel and every nerve, dividing more and more, proceeded from the heart and brain towards the surface; and this, by philosophers and physiologists who either preceded Haller or adopted his more mature views, was termed the law of centrifugal developement. But in consequence of the labours of Serres and Geoffroy St. Hilaire this notion is almost entirely abandoned, and the opposite doctrine, that of eccentric or centripetal developement is now generally received. Serres and Geoffroy St. Hilaire say—and there is no doubt that it is true to a great extent, though not entirely,—that the vessels and nerves are formed before the heart and nervous centres—the brain and spinal marrow. I proved to you on a former occasion, that the blood-vessels were formed before the heart: and that even the motion of the blood could be seen before the pulsation of the heart, clearly showing the correctness of the general law laid down by Serres and Geoffroy St. Hilaire, in opposition to the philosophic dogma of the organisation of parts taking place from the centre to the surface, rather than from the surface to the centre. The heart, for example, the brain, and the spinal marrow, are very frequently found wanting in cases of monstrosity; but the blood-vessels and nerves are never wholly deficient. They may be more or less deficient, thus representing the structure of inferior animals, but they are never entirely wanting. If these vessels proceeded from the heart, the spinal marrow, and the brain, and those three organs were deficient, the vessels would be deficient also; but that is not the case, proving that the elaboration, the developement, of the vessels is not necessarily dependent upon the previous formation of the heart, the brain, or the spinal marrow.

Again; Serres contends (and he is supported to a great extent by Allen Thomson, a very good authority upon the subject of embryology) that the developement of the body commences from the two lateral halves, and that each central, each single organ is originally a double one. This can only be observed in the earliest periods of the formation of the embryo. The right and left portions are at first distinct and separate, but afterwards become united. Now if, from an arrest of developement, the union of the two halves is prevented, which occasionally happens, if this primitive state of formation becomes permanent, then two lateral organs, of course, are formed. If organs lying on the median line of the body, are originally composed of two halves—and this is clearly proved to be the case,—and any thing interferes to arrest or retard their developement, then that which ought to be a single organ remains permanently two. When this occurs in the human subject, it again presents as a monstrosity in a higher, that which is the natural structure in many of the lower animals. The two original halves of an organ may be quite distinct, or partially separate, according to the period of formation at which the arrest of developement took place.

Again; fissure of the lips, the palate, and the scrotum and spina bifida in man, are all specimens of arrests of developement, but are similar to the natural structure of inferior animals. Serres also states that the hollow organs situated on the median line are composed of two halves as well as the solid organs. There are, at one period of developement, two aortæ, two vaginæ, two uteri, &c.

All these organs are considered to pass through three successive stages in the process of developement. In the first stage, they are double, and the two portions are quite separate; in the second, they approach and unite upon the median line, the two inner walls being applied against each other; in the third, there is a developement of the inner walls, by which the two halves become gradually approximated, and that which originally constituted two separate halves is now reduced by a process of nature into one single organ. If by arrest of developement the second stage of formation remains permanent, the inner walls of the primitive organs, which form naturally a temporary septum, are not removed, and the organ is divided by a longitudinal partition. Here [showing the preparation] is a very rare specimen of a longitudinal division of the vagina and uterus, extending from the os externum to the fundus of the uterus, dividing both organs into two. The arrest of developement must have occurred here at a very early period; and here again we see realised in the monstrous formation of man the natural structure of different animals.

There is another fact dependent upon the law of developement towards the centre, and that is, the greater constancy of those organs which are of early formation than those of later developement. Any cause at any period of pregnancy disturbing the process of growth will very little, if at all, interfere with the developement and growth of organs nearly or perfectly formed; but it may have considerable influence upon organs as yet imperfectly developed. Thus, it has been found that the umbilicus and small intestines are by far the most constant parts in monsters; and that for the clearest reason, because they are among the parts first formed, and as such they are exposed to fewer causes of arrest or disturbance of developement than those which are afterwards formed, and which are exposed, to lapse of time and various circumstances interfering with their elaboration and growth. Many examples of the kind might be adduced. Still it is impossible for any one who reads the works of Serres and Geoffroy St. Hilaire with a determination to arrive at the truth, if he can, to go to the full extent of the position which those philosophers have laid down with respect to the laws of centripetal developement.

The causes of the arrest of developement and of the excess of organisation seem to be at present beyond our reach. Arrest of developement teaches us much as to the origin of monsters with deficient organs; but scarcely any thing as to cases of monstrosity from excess of parts. And the attempts to explain these rarer anomalies are as yet by no means satisfactory. There is another law by which the production of some anomalies has been explained, and that is, the law of compensation in different organs. Excess of nutrition in one organ is proved to involve the total or partial atrophy of another, and *vice versâ*. If one organ be preternaturally large, another is preternaturally small; or if one be preternaturally small, we find, by the same law of compensation, that another is preternaturally large; thus establishing a very curious law. Let us not neglect facts because they do not appear practical; they are always important, and we know not to what useful results they may ultimately lead. Many applications of this law of compensation may be made to the subject of monstrosities. Thus, for example, we occasionally see individuals with more fingers on one hand, and more toes on one foot, than natural; but, in the great majority of such specimens, if there be six fingers on one hand, there are only four on the other; or if there be six toes on one foot, there are only four on the other. The fact which is thus proved is explained by the term, law of compensation.

Another law which is very curious is that of the similar position of parts, or the affinity of similar parts for each other, called by Geoffroy St. Hilaire, "Affinité de soi pour soi."

If two or more organs perfectly resemble each other, they seem to have a strong tendency to unite and approach. Thus, physiologists have at all times been struck with the phenomena of double monstrosities; for it has invariably been observed—although until the labours of Serres and others of recent times it was never capable of explanation,—that in cases of double monstrosity parts of a similar kind were invariably attached to each other. This is constant and common to all monsters, and influences all the facts of double monstrosity. Thus, side is united to side, face to face, back to back; each part in the one corresponding precisely with the same organ in the other. Every vessel, every nerve, every muscle situated in the line of union of the monstrous body joins itself to the same vessel, the same nerve, the same muscle in the other half. This is a very curious law of nature, and is precisely analogous to the two halves of an organ originally separated uniting in their further developement. There are before us several specimens of double monsters, tables, and plates, illustrating the truth of this position. And here, in the "Recherches D'Anatomie Transcendante," by Serres, you see clearly illustrated, in the different plates exhibiting the anatomy of the double monster Ritta-Christina, this law of "*Affinité* de soi pour soi." Each similar bone is attached to a similar bone on the opposite side. We shall never find an artery attached to another artery of a different nature. Knowing this fact, we can at once distinguish between true cases of monstrosity and those which are alleged to have been met with, but which really never occurred; we can distinguish between the fabulous monsters of by-gone days, and those which really existed. Many cases of monstrosity recorded in former times were mere fables. In many such instances one head is represented as growing from the upper, the other from the inferior part of the body; the back of one was said to be attached to the belly of the other. No such cases, I believe, were ever seen. The law regarding the formation of double monstrosities is universal and invariable, so far as we can judge from the specimens before us, and all those I have seen in English or foreign museums.

Passing over a great many intermediate observations made by St. Hilaire, I come to something more practical, and will make a few observations on certain anomalies from a diminution of the colouring matter.

It is well known that the skin derives its colour from a particular principle, named pigmentum. This pigmentum may be less coloured or less abundant than usual; it may be wanting entirely, or it may be too deeply coloured. Again, there may be simple alteration of colour.

I will first give a brief sketch of that state which arises from a diminution of colour. Individuals whose skin is but slightly or not at all coloured, have long been known by the name of *Albinos*. They were at first suppossd to be a particular race, but albinism is now known to be the result of some individual and accidental modification. The skin appears to be white in consequence of the absence of the pigmentum; the hair is also white; the iris is deprived of its colour, and it is usually red; the pupil is of a fiery red, and hence such individuals have a peculiar physiognomy. A family of this kind may often be seen walking up and down Oxford street. Albinos are frequently blind for some time after birth, in consequence of the permanent presence of the membrana pupillaris, which ought to disappear at a certain time of fœtal life. The condition of the iris does not enable them to bear a strong light; it is not opaque as it ordinarily is, but remains transparent, from want of colouring matter, and thus allows all the rays of light to pass through to the globe of the eye, rendering the organ of vision incapable of bearing them. Albinos are thus like many animals who see best in the dark. Perfect albinism is a common occurrence. Albinos are generally of a delicate constitution; their limbs are longer than natural, their head and their neck larger, and their physiognomy is dull and disagreeable. Usually the males are barren, but not the females. It is to a state of partial albinism that we must refer individuals partly white and partly black among the negro race. Thus, two blacks may have a white child; or the offspring of an Albino and a negro may be partially black. If we were not aware of this fact, adultery might be suspected—very unjustly. I remember a partial case of albinism in the family of a patient of mine in London. The females, and the females alone of this family, had had for many generations perfectly black hair, excepting a band of hair about two inches in breadth, in front, which was as white as snow. This was a curious case of the want of developement of the colouring matter. Their heads were shaved, and various experiments were tried, but all in vain; it appeared like a band of white ribbon, and I endeavoured, though without success, to persuade the two lasses whom I saw that it added to their beauty.

Albinos are seen in every climate, in every country; they are rare, however, in cold regions, but are common in warm, and in the tropics; and hence arose the general opinion which still prevails, that they are a distinct race of people. It is curious that they should exist paricularly in the tropics; it shows that cases of albinism are much more frequent among black than white people.

As to the nature and causes of this condition, I will dismiss them briefly; but it is worth while to observe that St. Hilaire has proved that long confinement and want of exercise will gradually produce a change of colour, especially if at the same time the food be scanty and bad. Thus the opinion of Blumenbach is to a certain extent supported, viz. that albinism is occasionally the result of disease. This is sometimes true, but it is much oftener true that it arises from an arrest of developement. The pigmentum of the skin is not present in the fœtus until an advanced period of pregnancy, and the offspring of blacks may sometimes remain as white as the children of the European race. It is easy to conceive that the developement of the skin may be arrested before the pigment has been deposited in the cutaneous tissue so as to impart to it its natural colour. Hence, the natural colour of the skin, the hair, the iris, and the choroid coat of the eye, may remain deficient simply from an arrest of developement, and without disease.

As a proof that this anomaly may be referred to an arrest of developement, I may mention that albinism is not the only fœtal condition which remains permanent. The fœtus during the second half of its intra-uterine life is covered with a fine downy appearance, observable with the naked eye or with a microscope. In the process of developement this downy appearance is removed, but in almost every case of a perfect Albino it permanently remains over the whole surface of the body, showing the arrest of that developement by which the downy appearance ought to have been removed. Again, the frequent presence at birth of the membrana pupillaris is another proof of arrest of developement.

I will now make a few observations upon the anomalies arising from an excess of colouring matter, or melanosis. The presence in the skin of a deeper pigmentum than natural, constitutes, according to St. Hilaire, a species of congenital melanosis. This is not uncommon in many animals; but it is less common in man than albinism. The term *melanosis*, I may observe, is usually applied to a particular form of disease characterised by black or very dark tumours, which appear in the different tissues of the body, at various periods of life. I must not travel from my subject to touch upon one on which I have no information to offer, but I may just show you this beautiful specimen of melanosis, one of many from the collection of Mr. Kiernan, who has been long investigating the subject with his well known industry and ability. Many nævi materni are nothing more than examples of congenital melanosis. Writers in general confound under the term nævus two states of very different characters—the one being melanosis of the skin, depending on an excess of colouring matter; the other arising from a preternatural condition of the blood-vessels of the part, the latter being technically known by the name of *aneurism by anastomosis*, an appellation given to it by John Bell. Complete melanosis may occur suddenly in the adult. Ruysch published the case of a man who at the age of 70, in consequence of some powerful moral emotion, became in one night as black as a negro. There other cases of the same kind on record, which have been classed by the older writers under the term *black jaundice*, from the person becoming not perfectly black, but of a dark and deep colour.

Nævi, depending upon an anomalous condition of the blood-vessels, are red, violet, or black; those which are red become deeper from mental emotion, heat of the skin, or any circumstance capable of producing a blush on the surface of the body. These vascular nævi are generally elevated above the surface, and may appear in every organ and of every form. I saw one case, shown to me by Dr. R. Lee, which covered nearly the whole body.

These vascular nævi increase by heat, and of course they are affected by the warmth of summer; at that season they are redder than at others, and hence the popular belief that they resemble certain fruit which has been longed for by the mother, and that they follow the laws of its growth. This is all nonsense. It is true that these nævi become redder when the fruit is ripe; but that is because a greater determination of blood takes place to the surface of the body during the warm weather, and thus the nævi become elevated and present a more turgid and red appearance than at other times.

Sometimes nævi disappear after birth; sometimes they give way to compression, and this is one of the means occasionally had recourse to for their removal. It is worth while, however, to know that Recamier says, that however simple the treatment of vascular nævi by compression may be, yet it is not safe to employ it; for although the surface may appear to be perfectly healthy, yet the amount of compression necessary for the purpose of cure is extremely likely to produce cancer. I shall in a subsequent part of the course enter upon a detailed account of the nature and treatment of nævi.

Congenital melanotic stains upon the surface of the skin vary greatly in situation, form, and colour, and sometimes they are covered with hair. They are often, by the public, said to resemble some animal by which the mother has been frightened during her pregnancy. But how is the evidence obtained upon which this foolish belief is founded? A woman is delivered of a child, having upon the surface of its body a dark stain, perhaps covered with hair. The attendant gossips assert that it is like a cat, a rat, or a mouse. The mother is asked if she has not been frightened by either the one or the other of those animals during her pregnancy. If she answer in the affirmative, the parties are, of course, satisfied. If she reply in the negative, she is asked by what she was frightened, or what she saw while she was with child. And you may easily imagine that such a train of inquiry must lead to the wished-for conclusion that the stain upon the child resembles something—no matter what—which the mother saw in the course of her pregnancy. During the French revolution a woman was delivered of a female child which had a dark spot upon its arm. This was converted into a very correct resemblance of the cap of liberty; and, the important fact being communicated to the government, the woman obtained a premium for having brought forth a child with a revolutionary emblem on its arm!

These nævi generally remain during life, unless removed by surgical means.

Thus, gentlemen, I have ventured, for once, to depart from purely practical topics, in order that I might give you a general sketch of the curious and interesting subject of monstrosities. In the next lecture I shall resume and complete the topic.

(*To be concluded in our next.*)

BIBLIOGRAPHICAL NOTICES.

Bell's edition of A. Combe on the management of Infancy.[1]

The volume before us is intended rather for the *laity* than the profession; yet, proceding from two able hygienists, it could not fail to contain much that is interesting to the latter.

Dr. Combe has been highly successful as a writer on popular medicine, if we regard the number of his first publication—on physiology—sold in Great Britain as well as in this country. His Principles of Physiology merited that success, and served as a prolegomenon to his Treatise on Digestion, which followed after; but which, in our estimation, was a far inferior work, and owed perhaps its very existence to the case of San Martin, now so well known as having furnished Dr. Beaumont with the materials for his work on the gastric juice.

The publication before us consists of various chapters. 1. Introductory explanations; 2. Extent of mortality in infancy; 3. Sources of disease in infancy; 4. Delicacy of constitution in infancy; 5. Conditions in the mother affecting the health of the child; 6. Of the constitution of the infant at birth; 7. The nursery and conditions required in it; 8. The management of the infant immediately after birth—washing and dressing; 9. Food of the infant at birth; 10. On the choice, properties and regimen of a nurse; 11. Artificial nursing and weaning; 12. Cleanliness, exercise, and sleep in early infancy; 13. Management of the infant during teething; 14. Management from the time of weaning to the end of the second year; 15. On the moral management of infancy; and a supplementary chapter by Dr. Bell, containing many facts and reflections applicable to this country.

MISCELLANEOUS NOTICES.

Treatment of poisoning with narcotic substances.—By T. T. G. Boisragon, M. D.[2]—Notwithstanding that the subject of poisoning by opium and other narcotics has been so ably and frequently treated of by eminent authors, and as there is, I fear, too great a tendency in medical practitioners to form an unfavourable prognosis, after having in such cases used the stomach pump and emetics without the desired effect, I am anxious, with your permission, to make a few additional observations concerning the mode of rousing patients, upon a principle which, although it may have been occasionally, but obscurely, hinted at, has not, I conceive, been sufficiently insisted upon; and that is, continued novel or alternate impression upon the nervous system through the medium of the stomach, and the external surface generally.

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[1] Treatise on the Physiological and Moral management of Infancy. By Andrew Combe, M. D. Fellow of the Royal College of Physicians of Edinburgh, &c. &c. with notes and a supplementary chapter, by John Bell, M. D. Lecturer on the Institutes of Medicine, &c. 12mo. pp. 307, Philad. 1840.

[2] London Lancet, March 7, 1840, p. 879.

This novelty of impression, as I term it, may be produced by any means which may appear to the practitioner most appropriate at the time; but the mode which I have found the most ready for producing this effect, is, alternation of impression with hot and cold water, on different parts of the surface of the body. I am well aware that Drs. Christison, Paris, and Beck, recommended cold water to be thrown over the head, chest, &c. Dr. Paris says it rouses the energy of the brain. It is also considered useful to assist the action of emetics. Dr. A. T. Thomson recommends the use of the warm bath.

Sprinkling the chest and back of the patient with cold water, while in the bath, has also an excellent effect in rousing the system; yet, even these, in a short time, the relations remaining the same, lose considerably their influence, as I have myself proved, and for this reason it is that I am anxious, lest, by attending literally to the particular remedies recommended by these excellent authors, the *principle* of alternate impression, which ought to be insisted upon, should be lost sight of. Besides, it frequently happens that a warm bath (particularly amongst the poor) cannot be procured; how, then, can we well supply its place, unless we bear in mind the principle upon which it is used? And this I apprehend to be threefold, viz. to rouse by general impression, to restore or increase animal heat, and to determine the blood to the surface, in order to assist in relieving, if possible, the congested state of the lungs and right side of the heart, produced by the state of coma which narcotics induce.[1]

Hence the great use, in such cases, of causing patients, if we can, to respire frequently. Artificial respiration, where it could be effected, would, for this reason, be also valuable in extreme cases, as a proof of which I would refer my readers to some interesting experiments of Sir B. Brodie, in the "Phil. Trans. 1812," in which the circulation was maintained by artificial respiration, after the natural respiration had been suspended by the action of narcotic poisons, until their baneful influence upon the sensorium had passed off, and the sensibility and consequent natural respiration were restored.

Now, I consider that these indications may be fulfilled by the judicious use of warm and cold water. It must be evident that we fulfil all these at once by placing the extremities in warm water, and by passing a sponge, dipped in the same, over the shoulders, chest, back, &c. This should be as hot as the hand can bear it. But the first indication, which is the grand object, viz. to rouse, is mainly answered, and the effect increased, by a sudden change of impression produced by dashing the face with cold water, or passing a sponge dipped in it, over the head, chest, &c. when we find the first, or warm impression,—of which we can fairly judge, by the crying, groaning, or inspiration of the patient,—goes off; or, in other words, when the nervous system is no longer cognizant of it. Cold water, indeed, should be dashed in pretty large quantities, when done occasionally with the hand.

While we are thus endeavouring to rouse the patient by external means, we must not forget, of course, those which are commonly used internally, as weak acidulous fluids, diffusible stimuli, &c.; even these, I consider, it would be better to vary, and upon the same principle.

I think these observations may be sufficiently illustrated, without troubling you with more than the two following cases:—

Case 1.—A poor woman administered to her child under two years of age, between the hours of 6 and 7, A. M. a teaspoonful of laudanum, instead of tincture of rhubarb, which she had been in the habit of giving it for prolapsus ani. Fortunately she discovered the mistake immediately before she left home to go to work, and sent immediately for the parish surgeon, who arrived about seven o'clock, and administered an emetic, which not operating as he wished, he gave it another; this dose had the effect of evacuating the stomach, but, as I afterwards learnt upon inquiry, with scarcely any trace, by smell, of the existence of opium. After leaving directions to keep the child moving, he left the house with the following observation:—"No man can save that child; and as you have got into it, so you must get out of it as well as you can."

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[1] See also "Beck's and Christison's Med. Jurisprudence."

I take particular notice of these words, without wishing to make an unkind observation concerning any practitioner, but only to show how readily patients are by some considered to be beyond relief; and, be it observed, in this case it was even after the operation of an emetic.

The friends, (for the mother was in too distracted a state of mind to render any assistance) moved the child about and shook it for two or three hours; but finding the stupor continue, they abandoned all hope, and laid it down upon its bed, as they thought, to die. The mother, whom I had formerly attended, insisted that I should be sent for, notwithstanding the resistance on the part of the friends, after the surgeon's remark; they accordingly sent for me, and I arrived not until after eleven o'clock, A. M. When I entered, I found the child, lying upon its bed, breathing stertorously, and the colour of the face changing to the livid. They told me it had been lying thus about half an hour. I caused it to be placed immediately in a warm bath, and to take alternately weak vinegar and water and strong coffee, at the same time bathing the head with cold water. All these means at first roused the child, and made it cry, but I found that their effect soon went off; the back and chest were then sprinkled with cold water which acted at first powerfully, but again the little patient relapsed into its former state of stupor; it was now taken out of the water and placed upon the knee of one of the attendants, and the sudden impression of the cold air upon the whole surface of the body at once was quite sufficient to rouse it; this effect, however, not continuing long, upon reimmersion in the warm bath it cried out, and showed clearly the efficacy of the alternate impressions. Having now satisfied myself of our power to rouse the child, I left the house with directions to continue this sort of treatment at intervals of an hour or two, *e. g.* using friction, dressing it, and giving it exercise, together with the warm bath two or three times in the day, if necessary, and continually to administer internally some of the fluids above mentioned. I saw this patient again in the afternoon; it was still drowsy, but better. I desired the friends to continue the treatment, and bring the child to me in the evening, which they did, perfectly recovered.

Observe, this practice should be continued, according to circumstances, from three to twelve hours. (See "Christison's Medical Jurisprudence.") The patient should be also occasionally roused, even when he may be allowed to sleep, in order to be sure of his recovery.

CASE 2.—The other case is that of a female—she might be about 50 years of age, who having suffered domestic trouble took laudanum, with the intent to commit suicide, in the following manner:—Between seven and eight o'clock in the evening she went out and bought two-pennyworth (as she said) of laudanum, which, as soon as she was out of the shop, she swallowed; she then went to another shop and bought three-pennyworth, which she made use of in the same way; she afterwards went to a third shop in the neighbourhood, and bought two-pennyworth more, but paused a few minutes before taking it, and conversed with some acquaintance whom she accidentally met, but as soon as that person left her she took the remaining dose, and returned home, keeping what she had done a secret from her family. At length, however, her son perceiving something irregular in her manner, began to converse with her about herself, and finding him importunate, confessed that she had taken opium. He then went for medical assistance, but could not procure any until ten o'clock, when two medical attendants arrived, one soon after the other, and tried the stomach-pump, but did not bring any thing away that at all satisfied them as to the presence of opium.

Finding her now in a state of great stupor, two persons were employed to shake her whilst sitting in her chair, but with little effect. One of these gentlemen came to me requesting my assistance. Although I attended immediately, I did not arrive until past 11, P. M., when I suggested that her feet should be put as soon as possible into hot water, and the head, neck, and chest bathed alternately with hot and cold water, while acidulous fluids, ammonia, &c. should be given internally. When I found that these means were losing their influence, I directed that the feet should be placed in cold water: this, as might be expected, produced a sudden and powerful effect; but it should be particularly observed that the feet should not be allowed to remain above a few seconds at a time in the cold, for the reasons mentioned above, in speaking of the warm bath; they were consequently soon replaced in the bucket containing the warm water. After persevering in this plan for rather more than two hours, the patient recovered so far as to converse a little; I then directed that she should be wiped dry and rubbed, still continuing the fluids internally, and that if she was found to relapse at all, to bathe her again; but in a short time she was so far cognisant, as to insist upon being placed by the fire, and soon after went to bed. I may add, that, perhaps a little is due to the fact that some of the fluids given internally with a large spoon, having accidentally gone the wrong way, made her cough.

I trust these two cases are sufficiently illustrative of the power which we gain by such a plan of treatment; and of the utility of making it public, since in the first the practitioner had no hope, and in the second one of the medical attendants thought proper to call in further assistance. I may also mention (to show how even well-informed persons may lose sight of the principle here inculcated) that the other medical man attending this last case, exclaimed, when he saw what I was doing, "That is Christison's plan, is it not?" Besides, I would observe, that although occasional rousing by physical force or shaking may be useful, it requires great exertion on the part of the attendants, who may be difficult to procure; and it is also very fatiguing and painful to the patient, and if not continued most unremittingly, it is, I am inclined to think, apt to confirm the stupor rather than relieve it.

On the treatment of croup by large doses of tartar emetic.—By Charles Wilson, M. D. Kelso.[1]—I have now treated in all twelve cases of croup in children with high doses of tartrate of antimony on the contra-stimulant plan, and of these, two only have died. In one of the fatal cases there had been distinct and severe croupy symptoms two days before I had any opportunity of exhibiting the medicine, yet its use was followed by a striking relief of these symptoms. Within the first seven days of treatment, the patient, a boy of four and a half years of age, took thirty-six grains of the tartrate, in doses which averaged half a grain, given at first every hour, and afterwards every two hours. The cough and respiration improved from the beginning, and at the close of the fifth day of treatment resembled what is heard in ordinary catarrh. The voice improved on the sixth day, and at the close of the eighth day of treatment it was heard distinctly, though previously little more than a feeble whisper. The medicine frequently caused vomiting, but no catharsis; the bowels, on the contrary, requiring to be regulated by enemata. On the eleventh day there was a relapse, and on the twelfth day the cough was again croupy, and the inspirations sonorous. I hesitated, and I believe improperly, in again employing the antimony; and the patient died on the fifteenth day after I had first seen him, and the seventeenth from the commencement of the disease. In the other case the patient died on the fourth day of the treatment, the antimony, however, having never been properly administered, nor my directions in other respects implicitly followed. With respect to the successful cases, I may observe, that I certainly met, for the most part, with little tolerance of the remedy in as far as the stomach was concerned, vomiting having been freely produced in nearly all; but there was no troublesome catharsis, and, even in one instance where there was a tendency to diarrhœa previously to the exhibition of the antimony, this ceased on the second day of the treatment, and it became necessary to have recourse to mild laxatives. Indeed, not a single case occurred, during some part of the treatment of which it was not requisite to exhibit castor oil, infus. sennæ, or some other remedy to act upon the bowels. The treatment was generally commenced with the application of leeches to the larynx, which were followed by warm poultices, frequently renewed; and, simultaneously with the leeches, the tartar-emetic was begun in doses of one fourth or one third of a grain, generally at first every hour till a decided impression was made, and afterwards every two hours till the patient was considered in safety; care being taken that its use was not intermitted at too early a period for the certainty of the cure. The remedy was usually exhibited in a mixture with a little mucilage, prepared with warm water to ensure its solution; and occasionally, with the older children, half a minim or a minim of T. Opii was joined to each dose, which seemed to have a marked effect in ensuring tolerance of the medicine, without diminishing its sanatory effects. The largest quantity given in any of the successful cases was sixteen grains, and in this case the tolerance was complete after the first two doses. In one of the cases the antimony, at a certain period, was combined with calomel, of which upwards of a drachm was exhibited. A blister was generally applied to the top of the sternum towards the close of the treatment, in order to obviate the risk of a relapse.

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[1] Border Med. Society, 1839, and British and For. Med. Rev. April, 1840.

I am well aware that the tart. of antimony has been employed by numberless practitioners in croup, and that Cheyne among the rest has prescribed it in considerable and frequently repeated doses; but I am not aware that any one has exhibited it in precisely the same way or with the same aims as myself, or that they have sought from it any thing beyond its ordinary well-ascertained action as an emetic. I have thus had no guide to direct me in the use of the remedy, an advantage which I probably might have possessed had my acquaintance with medical literature been more extensive; and, of course, I do not pretend that the limited experience which I have had of it has established its value beyond dispute. Having formed my diagnosis, however, with what care I could, and having treated my cases at periods when I heard of others attended with fatal consequences occurring in the vicinity, and my success in the treatment having been far greater than any I had hitherto attained with other methods, I considered myself justified in laying these details before you, and in recommending the remedy to your attention.

On the relative frequency of Herniæ at different ages.[1]—M. *Malgaigne* has communicated to the Royal Academy the following details of his inquiries upon this subject. They are drawn from three series of observations, collected at the central bureau of hospitals at Paris during the close of 1835, and during the two succeeding years.

The first series embraces 410 cases which were noticed in persons who applied at the central bureau for trusses. Of this number 335 were males, and 75 were females.

The second series exhibits a total of 2,767 cases;—of which 2,203 occurred in males, and 564 in females.

The third series comprises 2,373 cases;—1,884 of which occurred in males, and 489 in females.

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[1] London Medico-Chirurgical Review, April, 1840, p. 529.

From these data we may reasonably conclude that ruptures are four times as frequent in the one *sex* as in the other.

Now with respect to the influence of *age* as a predisposing cause of hernia.

Among infants under twelve months of age herniæ are more frequent than during the second year of life. During the following three years the tendency becomes strikingly less and less.

In considering the period of life between five and twelve years of age, it would seem that hernia is of more frequent occurrence during the latter than during the former half of this time. Hence we may infer that there is a *recrudescence*, at about the ninth year or so. This *recrudescence* or increase of predisposition, is still more marked during the next eight years—between thirteen and twenty. It is however to be particularly noticed that the increase bears exclusively on the male sex.

From the 20th to the 28th year, the number of herniary patients very sensibly increases, whether we take them in the mass, or distinguish them according to their sex.

Among men there is an increase of at least one fourth; and among women the increase is nearly one half. The rapid increase among males from the 13th to the 20th year of life may be attributed in part at least, to the laborious occupations in which they are engaged. The same cause operates no doubt during the next eight years on both sexes; to which is now to be added the influence of marriage, and also of pregnancy.

From the 28th to the 29th year of life there is a notable augmentation in the disposition to herniæ—stronger indeed among women than among men; and indicative of some secret influence acting on the constitution, which becomes more decided in after life.

The decennial epoch from 30 to 40 years of age may be divided into two halves, during the first of which the tendency to ruptures seems to remain nearly stationary, and during the second becomes considerably and suddenly greater—the average number for the series of the year 1836, being 29 in the first five years and 58 in the next five; and for the series of the year 1837, 26 for the first five years and 46 for the next five; thus showing an increase of nearly a double.

During the next decenniad, from the 40th to the 50th year, the average decreases;—viz. from 58 to 54 for the series of cases for 1836, and from 46 to 42 for that of the following year. But here there is a marked difference in the relative frequency of herniæ according to the sexes. In the earlier years of life, the proportion of females affected with rupture was, as we have stated above, not more than a fourth of the number of males; but about the age of forty, this proportion rises considerably, some new cause of predisposition seeming to be operative about this period of life.

If, for example, we take the two preceding periods—from 30 to 35 years, and from 35 to 40 years—the proportion was found to be thus:

54 females and 231 males,
100 females and 418 males,

—the proportion being in either case short of a *fourth*. But during the next ten years, from 40 to 50 years, the number of women affected with herniæ was 242, while that of men was 722—giving a proportion of one *third*.

From 50 to 60 years of age, the general number of herniary patients increases, and the annual average becomes again equal to, or even above, what it was from the 35th to the 40th year. Moreover, the relation between the two sexes re-appears very nearly as during this latter period of life. From this we may infer that there is an increase of herniæ among men, and a decrease among women, during the period between the 40th and 50th year.[1]

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[1] There is surely a mistake here; as we have been told in the preceding paragraph that there is a very marked increase of the complaint among women during the fifth decenniad of life. The decrease takes place in the next decenniad—viz. from the 50th to the 60th year, and not from the 40th to the 50th year.—(*Rev.*)

During the seventh decenniad—from the 60th to the 70th year—the general number decreases, and as that of women seems to remain about the same, the proportion re-becomes nearly one *third.*

During the next decenniad, the number of herniæ in men was found to have decreased by not quite a half, while in women it had fallen by at least two thirds. This difference seems to indicate, that at this epoch of life the mortality, which is evidently higher in herniary than in other persons, would be still greater from this cause in women than in men. If we follow the decrease of the herniary population, year after year, we no longer observe at this period—the eighth decenniad—as we had observed in the preceding ones, new cases of the disease to fill up the blanks caused by death. Thus, in the total of 3,140 cases comprised in the two series, we find 48 in individuals of seventy years of age, only 22 of seventy-five years, six of eighty, five of eighty-one, three of eighty-two, and one of eighty-three years.

M. *Malgaigne* has lastly endeavoured to ascertain the proportional number of herniary persons to the entire population of France. According to his inquiries, there are about two in every 41 of the inhabitants. He has also tried to determine the relative frequency of the complaint in the different provinces; but his data on this topic are still very imperfect.

Observations on diffuse inflammation.—By Henry Kennedy, M. B.[1]—This is an elaborate essay on a very important subject. We regret that we have only room for the conclusions which Dr. Kennedy considers as warranted by the investigation entered upon by him. They are as follow:

1. That diffuse inflammation will not attack a person in perfect health.
2. That the bad state of health preceding diffuse inflammation is powerfully caused by anxiety of mind, by great bodily fatigue, by shocks of the nervous system, by improper diet, or by any thing which has a tendency to lower the general healthy tone of the system.
3. That this deranged state of the health is shown principally in a vitiated state of the bowels.
4. That when once this unhealthy condition is established, the slightest cause is capable of inducing diffuse inflammation.
5. That venous inflammation does not necessarily cause diffuse inflammation.
6. That venesection may cause diffuse inflammation, the vein, however, remaining healthy.
7. That when venous inflammation does exist, the fever which accompanies it is more likely to be of the typhoid type than when diffuse inflammation exists alone.
8. That diffuse inflammation may attack several parts of the body in rapid succession, or it may be confined to one part, as the hip, or one organ, as the lung.
9. That pus may be poured out into the joints, serous cavities, or cellular structure without any appearance of surrounding inflammation.
10. That, at the very onset of the attack, the free application of the actual cautery holds out a fair probability of checking the disease; but, when once formed, free and deep incisions are the only treatment on which any reliance can be placed.

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[1] Dublin Journal, Jan. 1840, and British and For. Med. Rev. April, 1840.

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For the American Medical Intelligencer.

ART. I.—CASE OF CYANOSIS.

Hypertrophy of the Heart, especially of the right divisions—Autopsy—Patescence of the foramen ovale—absence of the pulmonary artery—communication of the aorta with both ventricles.

BY J. S. ROHRER, M. D., OF PHILADELPHIA.

With remarks by the Editor.

To Professor Dunglison:—

Sir—In the course of the last week, I was requested by a medical friend to make an examination of a child, whose peculiarly *blue* appearance during life excited much attention. The lesions presented by examination have been deemed, by several anatomists to whom the heart has been exhibited, if not *unique*, at least as extremely curious and rare—I send you the case with some remarks for publication in your valuable journal, and would thank you to append to it your observations, with reference to similar cases.

Very respectfully yours,

J. S. ROHRER.

Chestnut street, Philadelphia, 30th July, 1840.

History.—In presenting this case, I regret exceedingly that no correct account of the symptoms could be furnished by any of the physicians in attendance. The parents of the child being poor were imposed upon by every species of cupidity and empiricism. A great number of persons were consulted at different times, but no correct or satisfactory information could be obtained from any. My medical friend, who requested me to make the autopsy, though highly intelligent, did not pay much attention to the case, and has but an indistinct recollection of the symptoms. He states that the child was subject to paroxysms of dyspnœa, and that the skin was perfectly blue.

The following particulars were obtained from the mother of the child. It was a male infant, *eleven months old*—large and well formed at birth—no blueness was observed the first day, the room being rather dark. On the second day a blueness was perceived which gradually increased until the third day, when it could easily be observed all over the body. The child seemed hearty, with the exception of the blueness of the surface; sucked well; in two weeks after, it began to decline; did not improve any more, but wasted away gradually, and never appeared to increase much in size. It had frequent spells of screaming; took fourteen drops of laudanum at a dose before it was three months old, which was subsequently increased in quantity. The laudanum was not discontinued until a short time before its death.

At six o'clock on the evening preceding its death, spasms occurred, which terminated its existence at one o'clock in the morning. Two weeks before its death vomiting supervened, which continued until a short time before its death.

The heart beat violently during the whole period of life; so much so that the pulsation could be perceived through the clothes; a pulsation was felt like the beating of the heart below the stomach near the hips; it is not recollected on which side; the pulse was very fast; the child moaned much and appeared in constant distress; would frequently have attacks as if it was suffocating; cold water applied to the feet would bring on those paroxysms immediately; had a throbbing of the arteries of the neck; appetite very good during the whole period; would eat frequently so much as to cause vomiting; was intelligent for its age; could not stand upon its feet; had no strength in its limbs; in those paroxysms would hold its breath for a long time and turn up the eyes.

Was blue at all times, but occasionally purple, the nails on the hands and feet like indigo; had no bowel complaint, nor fever, and sucked well until the last.

The breathing was not very hard, except in the paroxysms, to which it was subject. As many as fifteen doctors were employed, the last of whom was a Homœopathist.

Necroscopy.—The heart at its base is six inches in circumference; its length from the apex to the semilunar valves of the aorta, two inches and a half.

The right ventricle, at the point where the pulmonary artery should have originated, is half an inch in thickness, and the middle and lower portion of it is but one fourth of an inch.

The left ventricle is uniformly one fourth of an inch in thickness.

The right auricle is much distended, being about three times as large as the left auricle. The musculi pectinati are very strongly developed.

The lungs are normal.

The left auricle is unusually small, and has five pulmonary veins.

The foramen ovale is deficient in several parts; the right auricle communicating with the left by different apertures. The valve of the foramen, for instance, is not closed, and is one sixth of an inch in diameter. At the upper and lateral portions of the foramen ovale, are two more foramina, on each side, both of which would admit a common quill. On each side of the eustachian valve are one or two orifices, the largest of which would admit a blow-pipe.

The valvulæ tricuspides are of a scarlet colour, slightly tumefied, and cartilaginous.

The capacity of the right ventricle is much increased, and about four times as large as the left ventricle. Whilst the right ventricle would hold an ounce of fluid, the left would not hold more than two drams.

There is a deficiency in the upper part of the septum between the ventricles. A probe introduced into the aorta will pass with facility into each ventricle, and thus a communication is established between the two great cavities. This deficiency in the septum forms a foramen of half an inch in diameter, which is so placed that the communication between the right ventricle and aorta is more perfect than between that vessel and the left ventricle.

The *columnæ carneæ* of the right ventricle are greatly developed—thus corresponding with the superior developement of the *musculi pectinati* of the right auricle.

The mitral valves are normal.

The internal membrane of the left ventricle natural in thickness and slightly tinged with yellow.

The pulmonary artery is much smaller than common, not exceeding one line in diameter, and *does not penetrate to the cavity of the right ventricle,* but is suddenly *closed*, *ending in a pouch* near the root of the aorta, where it should have originated, viz. at the anterior and left part of the basis of the right ventricle. As it proceeds obliquely upwards in its proper course, on the left side of the aorta, it divides into two branches, at the root of which, the *ductus arteriosus* is inserted. Thus there is no direct communication between the *pulmonary artery* and the cavity of the heart. The branches of the pulmonary artery are very small, and will with difficulty admit the end of a probe.

The ductus arteriosus is one sixteenth of an inch in diameter.

The aorta as it arises from the ventricle, being placed immediately over the septum between the ventricles, is full half an inch in diameter, and suddenly diminishes to the usual size where the arteria innominata is given off.

The semilunar valves of the aorta are normal, closing entirely the aortic orifice.

Remarks.—The anatomical lesions presented in the preceding case are very remarkable; the most striking of which is, that but one vessel, namely, the aorta, communicated directly with the cavities of the heart, whilst the pulmonary artery terminated in a *cul de sac* in the muscular tissue of the right ventricle. The question at once arises, by what means was the pulmonary circulation maintained? The present state of physiological science compels us to suppose that such a circulation is essential to life, and that in this instance it must have been effected through some unusual channel. May not the blood have been conveyed in a retrograde course from the aorta through the ductus arteriosus to the pulmonary artery and by this vessel to the lungs? The function of the right ventricle in this case being vicarious in a great degree to that of the left, caused great hypertrophy of the parietes and dilatation of the cavities of the right side of the heart and correspondent atrophy of the left.

The aorta, it will be seen, was also much dilated. The question next arises, how did this phenomenon take place? It is plain that the blood being received on the right side of the heart, was forced through the foramen ovale into the left auricle, and through the tricuspid valves, into the right ventricle. The blood being thus propelled, the left ventricle received a portion of it from the left auricle through the mitral valves and the *opening of the septum*, whilst the greater portion passed into the left ventricle through the opening of the tricuspid valves.—The blood having thus arrived in both ventricles, the simultaneous contraction of which forced it at once into the aorta, their combined force acting upon that vessel gradually dilated it, in consequence of the impetus being spent on its parietes. It will be recollected that the dilatation did not extend beyond its great curvature.

Upon consulting several authors I have not been able to find any case in which the entire communication of the pulmonary artery with the right cavities was wanting. Several cases are detailed, in which a similar lesion of the septum of the ventricles occurred, and some cases are narrated in which the orifice of the pulmonary artery was extremely contracted; but no instance is cited in which there was congenital absence of *direct communication* between the right ventricle and pulmonary artery.

The learned editor of the Medical Intelligencer would confer a great obligation upon myself and the profession if he would have the kindness to communicate his observations on this subject.

Remarks by the Editor.

The pathological appearances found on the dissection of those who have died of cyanosis or kyanosis, are diversified and curious. All permit the admixture of venous with arterial blood so as to give rise to the colour of the surface so strikingly exhibited in the case described by our correspondent.

Gintrac,[1] who was professor of anatomy and physiology at Bordeaux, has collected the appearances presented on the dissection of fifty-three cases. In twenty-two of these, the aorta was found to arise from both ventricles. In thirty-three, the foramen ovale was open; in fourteen, the ductus arteriosus was wanting; in four, the heart was single, consisting of one auricle and one ventricle; in five, the ventricular septum was imperfect; in twenty-two, the pulmonary artery was contracted; in five, that vessel was obliterated; in one, the aorta was obliterated; and in four, the aorta arose from the right ventricle, the pulmonary artery from the left.

The various malformations of the heart have been well investigated by different pathological writers, and especially by Meckel,[2] and Hope, and more recently still by Warnatz of Dresden—the last writer having described them in reference especially to kyanosis.[3]

The various malformations as given by Dr. Hope, are as follows: 1. The heart single, like that of a fish consisting of one auricle and one ventricle, from which a trunk originates that presently divides into pulmonary artery and aorta; 2. Two auricles and one ventricle. In one case the patient attained the age of 22. 3. The foramen ovale remaining open, which is the most common malformation. 4. The foramen ovale and ductusarteriosus both remaining open. 5. The foramen ovale and ductus arteriosus open and the pulmonary artery obliterated at its origin. In one case, the cavity of the right ventricle was nearly obliterated, and in two others the septum of the ventricles was perforated. To this division the case, described by Dr. Rohrer, would seem to belong. 6. Ventricular septum deficient; auricular imperfect. 7. Ventricular septum deficient at the aortic orifice, so as to leave a common opening into that vessel from both ventricles; this malformation being generally accompanied with contraction of the pulmonary artery, frequently with an open state of the foramen ovale, and occasionally with obliteration of the pulmonary artery and patescence of the ductus arteriosus. 8. Ventricular septum perforated towards the base, associated with contraction of the pulmonary artery and patescence of the base. 9. Foramen ovale open, and pulmonary artery arising from both ventricles, and giving off the descending aorta; whilst the ascending aorta arises in the usual way. 10. Aorta arising from the right ventricle, and the pulmonary artery from the left; the foramen ovale and sometimes the ductus arteriosus remaining open. 11. The right auricle opening into the left ventricle instead of into the right; and the ventricles communicating by an aperture immediately below the aortic valves. The foramen ovale open.[4]

The heart in the case described by our correspondent appears to resemble that of the higher reptiles (höheres Reptilienherz, of Meckel) the ophidian, saurian, and chelonian, which consists of two auricles with a partitioned ventricle or a single ventricle. Meckel[1] refers to many such cases described by Pulteney, Hunter, Sandifort, Nevin, Abernethy, Cruikshank, Prochaska, Caillot and Duret, Corvisart, &c. and Warnatz[2] to others by Kreyssig, Hartmann, Tiedemann, Gintrac, Senac, Wolf, Lexis, Spittal, Bird, Beckhaus, Hunter, and others; but although these cases greatly resembled each other in the fact of a ready communication existing between the ventricles, they differed greatly in the details.

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[1] Observations et Recherches sur la Cyanose ou Maladie Bleue. Paris, 1824.

[2] Handbuch der Pathologischen Anatomie, von Johann Friedr. Meckel, u. s. w. Band 1, S. 419. Leipz. 1812.

[3] Art. Kyanosis, in Encyclopäd. Wörterb. der Medicin. Wissensch. Band xx. S. 608. Berlin, 1839.

[4] Treatise on the Diseases of the Heart and great vessels, and Mayo's Outlines of Human Pathology, reprinted in Dunglison's Medical Library. Philad. 1839.

In Lexis's case,[3] the aorta arose from the ordinary place in the left ventricle, which was more than usually developed; at the same time, there was an opening through the septum ventriculorum in a straight line with the embouchure of the aorta, which permitted a free communication between the right and the left ventricle, in such sort that one half the aorta might be considered to open into the right and the other into the left ventricle. The pulmonary artery was greatly diminished in size.

In a case related by Bird,[4] besides hypertrophy of the heart, a ready communication existed between the right ventricle and the aorta, at the place where the pulmonary artery ought to have been, and at the same time the carotid arose from the left ventricle.

In another case, related by Beckhaus,[5] of a "blue" child, but a slight trace existed of the septum ventriculorum; the valve of the foramen ovale, which was open, and the eustachian valve were present; and the ductus arteriosus was divided into two branches, one of which went to the right and the other to the left lung from the aorta; the pulmonary artery was wholly wanting.

Generally, the pulmonary artery has been found of very small size, (*Abernethy, Sandifort, Stenson, Hunter, Nevin, Caillot and Duret, Hope.*) Duret and Caillot[6] not only found the mouth of the pulmonary artery very narrow, and the coats thinner than usual, but the artery itself entirely impervious, and the ductus arteriosus wholly obliterated. Ramsbotham[7] found the pulmonary artery entirely wanting, its place appearing to have been supplied by the bronchial arteries.[8] Romberg,[9] in a case of cyanosis, found the aorta near the heart terminate in a *cul-de-sac.* It had received its blood through the ductus arteriosus from the pulmonary artery which was of unusual size. The child lived four days.

It would appear, therefore, from all the pathological investigations which have been instituted, that the main causes of cyanosis, or of the admixture of venous with arterial blood, are; *first*, the want of closure of the foramen ovale; *secondly*, the patescence of the ductus arteriosus beyond the proper period. *Thirdly*, the patescence of both the foramen and the duct beyond the normal time. *Fourthly*, an abnormous opening or openings in the septum between the ventricles, which have thus a free communication with each other and with the aorta; and, along with this malformation, narrowness or obliteration of the pulmonary artery. *Fifthly*, defective formation of the heart, which consists of but one auricle and one ventricle; and *lastly*, abnormous origin of the vessels from the heart.[1]

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[1] Op. Cit. S. 427.

[2] Loc. citat. S. 610.

[3] Hufeland's Journal für 1835, St. 12.

[4] Horn's Archiv. für 1821, Hft. 1.

[5] De Deformationibus Cordis Congenitis, &c. Berol. 1825, cited by Warnatz.

[6] Meckel, and Warnatz Op. citat.

[7] London Medical and Physical Journal, Jan. 1829.

[8] See, also, Müller, in Horn's Archiv. für 1822, Hft. 3. Hunter, Medical Commentaries by Duncan, ix. 325.

[9] Dissert. de Corde Vasisque Majoribus, &c. Berol. 1824.

ART. II.—A LECTURE ON MONSTROSITIES,

Delivered at the Middlesex Hospital School of Medicine, Feb. 22, 1840.

BY JOHN NORTH, ESQ.

Lecturer on Midwifery, and the Diseases of Women and Children.[2]

(Concluded from page 137.)

Gentlemen:—In resuming the subject of anomalies of structure, I shall first speak of the congenital softness of parts which are naturally hard.

The bones are the only organs in man or animals in which a deficiency of hardness is found. You know that all parts of the osseous system are originally soft membranes; that those membranes, in the second stage of developement, become cartilaginous; and, finally, that this cartilaginous state is converted into bone. Bone in man, as well as in animals, is, generally speaking, formed in the latter parts of intra-uterine life. It follows, then, as a necessary consequence, that if those parts which ought ultimately to become bones, are retarded or arrested in their developement, either the membranous or the cartilaginous condition may remain longer than usual, or even remain permanent through life. Whether these will retain a membranous or a cartilaginous condition, must depend on the period of intra-uterine life at which the arrest or retardation of developement occurs. Either circumstance may take place in several bones, but usually it occurs only in one, or a portion of one bone. The bones of a child's head, for example, have not unfrequently been found arrested in their developement, in consequence of pressure. In some remarkable cases such pressure has been inflicted by exostosis, or a preternatural growth of the pelvic bones of the mother. These examples are remarkable, inasmuch as they realise, in the species in which they are observed, the normal condition of other species belonging to classes beneath them in the zoologic scale.[3]

Anomalies arising from an induration of parts which are naturally soft, are attributable to an excess of developement. Nearly all the soft parts have been found osseous, but usually as the result of disease. Individuals are occasionally seen, the whole surface of whose bodies, instead of being covered with skin, is covered with scales resembling those of a fish. Such persons have been called porcupine families. This condition constitutes a species of disease, of which there are several varieties, termed *ichthyosis*.

There are various anomalies in the situation of parts, which arrest attention from their practical importance; they can only be explained by the theory of eccentric developement. Those organs are most liable to anomalous changes of position, which, in the early periods of fœtal life especially, are but slightly united to the adjoining parts. Displacement of the brain is by no means uncommon, constituting *hernia cerebri* or *encephalocele*. The brain may protrude at all the sutures, and between those portions of bone, the union of which takes place at so early a period of embryonic life that their primitive separation has only recently been known. For example, the brain may protrude between the two portions of the occipital bone, which ought to become permanently united. St. Hilaire mentions, that in one case a large portion of the brain protruded between the two halves of the occipital bone, which remained severed in consequence of an arrest of developement; it was mistaken for a common tumour, and was removed by a surgeon. The child died in a few hours after the performance of this ill-judged operation. Such children usually die soon after birth. Displacement of other parts not unfrequently occurs; for instance, of the lungs and the heart. The heart has been known to protrude through the parietes of the thorax. Most of these children are incapable of living, but a few have lived for many months. The digestive organs are frequently displaced, as well as the heart. Sometimes the diaphragm has been perforated, so as to admit the abdominal viscera into the thorax. Exomphalos, or umbilical hernia, may occasionally arise after birth, in consequence of the digestive viscera being pressed against the recently-formed and tender navel; but generally exomphalos is a primitive malformation, and the part protruded a portion of the small intestines; but sometimes a part of the omentum, or large intestines, or the liver, protrudes, in consequence of the abdominal parietes being deficient. The whole of these anomalies arise from the persistence of a fœtal condition. You are aware, from observations I formerly made when upon the subject of embryology, that till about the third month of utero-gestation the intestines are collected together, and lie outside the abdominal cavity. They form a mass inclosed in the sheath of the funis, which, at that time, is very large; and which, at that early period of embryonic life, is the substitute for the yet unformed abdominal parietes. When the abdominal parietes are almost entirely formed, there is scarcely any opening left but that at the umbilicus, through which a portion of the intestine may obtrude. The majority of children, if born alive with umbilical hernia, die a short time after birth. Occasionally, where the hernia is very small, and unconnected with other malformations, the child, if properly managed, may continue to live and enjoy tolerable health. Various internal displacements of the digestive organs are occasionally found, many of which are not otherwise important than as showing that they are almost always the result of the persistance of some stage of embryonic life.

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[1] Warnatz, Op. citat. S. 616.

[2] London Lancet, March 14, 1840, p. 913.

[3] Otto, "Lehrb. der Path. Anat." mentions a very remarkable example of this kind. A woman, who had exostosis of the pelvis, gave birth to four children, in each of whom a small part of the cranium was depressed and not ossified.

An anomalous position of the urinary and genital organs is not very uncommon; the bladder may protrude through an opening at the pubis, or the recti muscles on either side; its displacement through the pubis is not unfrequent; the bladder does not quite protrude, but looks like a subcutaneous tumour more or less above the pubis; this is called *extroversion* of the bladder. The bladder is not merely displaced, but its developement is arrested, its mucous membrane is turned out, and it is this which gives it the appearance of a reddish, soft tumour, opposite the symphisis pubis, or a little above it; at the upper portion of the tumour are generally found two small apertures, which are the openings of the ureters; through these openings the urine distils *guttatim*. It so happened that the first case I ever dissected presented a malformation of this kind; and here [presenting it] is a drawing of it taken at the time:—The anterior portion of the bladder is wholly wanting. The tumour, in these cases, projects more or less, and may be diminished by pressure; so long as the child is quiet the tumour is little, if at all, above the surface of the abdominal integuments; but when the child cries or strains, it is considerably elevated above them. In several cases where there has been this extroversion of the bladder, the umbilicus has been entirely hidden by the tumour, or has, perhaps, been lying under the protruded portion of the bladder; and hence it has been thought that certain children have been born without a navel, an occurrence which is physiologically incredible. As the urine is distilled *guttatim*, through the orifices of the ureters, which are represented in the drawing, the function of the urethra is not called into action; and according to a physiological law the urethra becomes impervious. The same remark applies to all canals, whether blood-vessels or any other tubes; if they are not called upon by nature to perform their function of transmitting the fluid that should naturally pass through, then they cease to be canals. The opening at the pubis or recti muscles, which is found in cases of extroversion of the bladder, is clearly and unequivocally an arrest of developement; nature has stopped in her work; in fact, the developement is not completed.

Extroversion of the bladder is always a serious malformation, for the discharge of urine is involuntary, and constantly going on from the ureters.

An anomalous situation of the testicles is neither uncommon nor practically unimportant. The testicles may descend sooner than usual, from an excess of developement, nature having terminated her processes more rapidly than she generally does; more frequently, however, the testicles do not descend into the scrotum at the usual time, from an arrest of developement; they may not descend till the ninth month of pregnancy, or even for weeks, months, or years, after birth, or they may never descend at all. They are often arrested at the inguinal canal for several years. In all these cases there is a persistance of the fœtal condition, and the situation of the testicles is analogous to the natural structure of various animals, in many of which the testicles remain permanently in the abdomen. None of these cases affect the generative powers of man; indeed, the popular belief is, that men whose testicles do not descend into the scrotum, are generatively more vigourous than those whose testicles are in their natural situation. If the testicles remain permanently in the abdomen, no external examination could convince the inquirer that those organs existed at all; and no doubt it is to this circumstance that we must refer those cases in which it has been imagined that men were capable of exercising their generative functions without testicles. Cases of anomalous situation of the testicles have occurred which are extremely important; at the age of puberty the testicles have appeared in the form of small tumours at the groins, and serious mistakes have arisen. If, at the age of puberty or before, a boy complains of a small swelling in the groin, be careful before you make up your mind as to the nature of the case or the treatment to be adopted; examine the scrotum, and ascertain whether the testicles are down. I have known cases in which the testicles forming tumours at the inguinal ring, have been mistaken for hernia; a truss has been applied, and inflammation and great suffering have been produced by the ignorance or carelessness of the practitioner. I shall afterwards enter into some details upon this subject.

Displacement of the kidneys is by no means a rare species of anomalous position of parts; one kidney is occasionally found, not in its natural situation, but in the pelvis. This is worth observing, because it refutes a physiological error. In cases of this kind the supra-renal capsule is retained in its natural situation, showing that the opinion of certain physiologists, who assert that the supra-renal capsule and the kidney are dependent upon each other, is incorrect; for when the kidney is in the pelvis, the supra-renal capsule retains its normal situation, condition, and size.

There are various displacements of organs which are not contained in the digestive cavities; for example, club-feet. Club-foot is, however, very frequently associated with other malformations. In 38 cases of anomalous structure, at La Maternité, of various kinds, Chaussier observed club-foot in 37 of them. This malformation may exist alone, but usually it is associated with other and more important organic deviations. Generally speaking, we see club-foot in acephalous children, *i. e.* monsters born without a brain, or merely a rudimentary brain.

Club-foot frequently arises from mechanical pressure inflicted during pregnancy, but generally there is an imperfect developement of the bones of the tarsus; it also occurs from rickets during intra-uterine life. When the foot is turned in, which is the most common species of club-foot, it arises from a persistance of the fœtal condition, for at an early period of embryonic life the foot is turned more or less inwards. Here we find another proof of the curious fact, that anomalous structure in man represents the natural structure of a great many animals. Sometimes the foot is thrown downwards, (the pes equinus, of authors) another example of arrest of developement occurring at a very early period of intra-uterine life, and again exhibiting in man the natural structure of many animals. Many mammiferous animals have their feet directed vertically downwards, and only rest in standing on their toes and nails. Similar distortions are occasionally seen in the hands.

The hair of the eyelashes is sometimes turned in at birth, constituting what is termed *trichiasis*, which occasionally occurs also after birth. The hairs being turned in on the globe of the eye, of course cause great irritation. It is not my object to speak of the treatment of these cases.

The blood-vessels, nerves, and muscles are subject to various anomalies of position. It is almost impossible to dissect a body without finding variations in the origin and termination of muscles, and in the course and distribution of blood-vessels. The latter are extremely common, some of these variations being of no moment, while others are very important in reference to practical surgery. The surgeon, when about to perform an operation, presumes that the blood-vessels to be involved in it are in their natural position; but he should know the possibility of this not being the case, and therefore will be careful to make an examination, and prepare for any accident which may arise from their abnormal situation.

All organs, however intimately connected with adjoining parts, may be displaced at birth, and most of these occurrences are explained by an arrest of developement, so that that becomes a permanent condition which, normally, should be only temporary. Sometimes in exomphalos, or congenital umbilical hernia, the organs have not quitted their natural position—they have never occupied it. The protruded part or parts have not escaped from the abdomen, as is generally asserted; congenital umbilical hernia is generally formed in a different way; from an arrest of developement the protruded parts have never arrived in the abdominal cavity. Sometimes, however, this species of hernia occurs after birth, the intestine having protruded from its natural place, and passed through a more or less dilated opening, or an opening which remains beyond the usual period.

The jaws are sometimes so narrow that the dental arch is incapable of holding all the teeth it is naturally destined to contain. This is not of practical importance; it is merely one item in the general account, illustrating the curious physiological fact of anomalous structure in man so frequently resembling the normal structure of animals; for in many animals we find the teeth standing one before another, from narrowness of the jaw. Another singular anomaly with respect to the teeth is, that they are sometimes merely fixed in the gums, resembling many fish, where they are not fixed in bony alveolar processes, but simply adhere to the soft parts. This supports the opinion of de Blainville and other physiologists, who assert that the teeth are dependent on the integuments rather than on a connection with the osseous system.

The whole of the lymphatic system is so uncertain in its distribution, that no detail has ever been attempted of it. Less commonly, but still not very rarely, we find similar variations in the distribution of the arteries and veins. The vena azygos, for example, varies so greatly in its course as to be scarcely twice alike. The jugular veins, again, are by no means constant in their course. The system of the vena portæ offers many variations in its distribution. The arch of the aorta and the vessels which arise from it often vary in their direction. Numerous other deviations exist occasionally in the distribution of blood-vessels in the human subject.

The knowledge of some of these facts is of practical importance. For example, neither the distribution of the veins nor the arteries at the bend of the arm is always the same. The common operation of venesection is generally performed upon the median cephalic vein. If the median basilic vein is chosen, the artery may be wounded. And the lancet ought never to be introduced before the situation of the artery is ascertained; for the division of the brachial artery into the radial and ulnar sometimes takes place much higher up than usual. Sometimes the brachial artery divides at the upper part of the arm, and then the branches which proceed from it correspond with the basilic and cephalic veins. Portal observes, that where there is this unusual bifurcation of the brachial artery, it is generally associated with a similar high division of the crural artery.[1] Again, the obturator artery generally arises from the hypogastric, or internal iliac artery; but not unfrequently it is given off by the epigastric artery. This is an irregularity in the distribution of blood-vessels of importance in reference to the operation for hernia.

Sometimes the ureters open into the urethra, and in such cases the bladder is generally absent. This is the natural structure of many animals. The ureters may open into the vagina or rectum. The vas deferens may open into the bladder or ureters. The vagina, or neck of the uterus, has been known to open into the bladder or rectum. In the latter case a woman may conceive and bear children. The anus has been known to enlarge sufficiently, with some laceration of the perineum, to admit the passage of the child during labour. In one case related by Portal, a woman had apparently no vagina, but only a small opening for the passage of the urine, and she had always menstruated by the anus. She was impregnated by the rectum, and at the end of pregnancy the very small opening near the pubis, by means of which it was impossible she could have been impregnated, enlarged, and delivery took place by the naturul passage. The intestinal canal has very frequently been known to open at some other part than the anus. In those cases there is a deficiency of the intestine, the gut ending where the anomalous opening is. This is important, as I shall afterwards mention, in reference to the treatment of imperforate anus.

Irregular openings of the male urethra are by no means uncommon. I have seen three instances. Sometimes it opens at the upper part of the penis, constituting a species of malformation technically termed *epispadias;* at other times the opening is on the lower part of the penis, constituting another species of malformation, called *hypospadias.*

Occasionally, some of the natural openings of the urinary organs are found wanting. Most of these anomalies arise from a persistance of the early structure of the embryo, and represent in man the natural state of inferior animals. The intestines have been known to terminate in the bladder. The expulsion of the urine, mixed with meconium, is a clear proof of that phenomenon. In most cases death is the result of these malformations, but sometimes infants have lived for months with them. A remarkable case occurred to Fournier, of the rectum opening into the vagina. He was called in by three pupils, who had been attending a woman in labour for three days. Difficulties arose; the bowels were much constipated, and the patient had not had a motion for some time. He desired a glyster to be thrown up; the pupils attempted to administer it, but failed, without knowing the reason. Fournier examined the patient, and found no anus, and on introducing his finger into the vagina, found that the end of the rectum was loose, and pressing upon the womb, as it was filled with fæces. There was no spincter ani. The opening of the gut was as large as its diameter. A canula was introduced, and the rectum cleared by a glyster; it was loaded with scybala and cherry-stones. The labour terminated well and easily.

Any of the external openings of the body may be wanting. The vagina may be completely imperforate, and so may the hymen. In these cases the menses have been retained; symptoms of pregnancy have existed, and serious mistakes have been made in practice, which I guarded you against early in the course.

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[1] This is an error on the part of M. Portal. A high division of the crural artery is infinitely more rare than that of the brachial.—*Sub. Ed. L.*

In other cases the urethra is imperforate, either at the glans penis only, or a large portion of the canal may be impervious. I have seen two cases in new-born infants, in which the orifice of the urethra was merely covered with a delicate membrane, which was removed without the slightest difficulty. But when the urethra is thus closed, we cannot be certain, before this slight operation, how far it is imperforate, or how serious the case may be. If the passage be wanting through a considerable part of the canal, the case is scarcely remediable. In some cases the opening of the nostrils has been found closed. Sometimes, as in the urethra, the obstruction merely consists of a thin, delicate membrane; at other times there has been a permanent adhesion of the nostrils. Sometimes the iris is imperforate, in consequence of the persistance of the two original halves of the membrana pupillaris. Sometimes the membrana pupillaris disappears spontaneously after birth, but that is very rare. It may always be assumed that the child will remain blind, unless the membrana pupillaris be removed by operation, as it once was by Cheselden in a case of this kind. Imperforation of the os uteri is not very uncommon. In some cases this anomaly arises from a membrane closing the os; in others, from the lips being united. Here is a specimen where it is scarcely possible to introduce a needle into the os uteri. Of course, although the os uteri be imperforate, the menstrual fluid will be secreted, but cannot be discharged, and then it will be necessary to make an incision into the uterus, as has been done by Delpech and others, with success. The uterus may expand to the size of pregnancy, from the gradual accumulation of the retained menses in its cavity, and all the ordinary phenomena of utero gestation be produced. Incisions have been made in many such cases into the uterus. and the patients have subsequently done well, and borne children. All canals lined with a mucous membrane, continuous with the skin, are liable to have their natural openings imperforate. This organic condition, which is frequently referred by pathologists to disease, is really attributable to an arrest of developement, from the persistance of a state which naturally ought to be only transitory.

The persistance of the ductus arteriosus, or foramen ovale, after birth, is by no means unimportant or uncommon. Either of these anomalies is occasionally found without other malformations of the vascular system, but this is rare; usually the heart is malformed. The embryonic or fœtal structure remains, and resembles the natural structure of reptiles. The persistance of the inter-auricular orifice and ductus arteriosus does not always, or even commonly, produce any particular symptoms during the first days of life, provided it do not oppose the perfect oxygenation of the blood; but such malformations sooner or later cause a disease called cyanosis, which I shall describe in a future lecture.

A complete inversion in the situation of the thoracic and abdominal viscera, the blood-vessels, and nerves, occasionally exists; all those organs which are ordinarily on the right being placed on the left side. Complicated as this deviation from the general plan of nature undoubtedly is, no disturbance of function is caused by it; and this well-known fact admits of an easy explanation. If the heart, for example, be placed on the right side of the thorax, as the situation of all the great blood-vessels is also inverted, and as they preserve their normal relations with the different cavities of the heart, the circulation of blood is not disturbed. If the spleen be placed on the right side and the liver on the left, the process of digestion is not interrupted, inasmuch as the position of the stomach is also inverted, and the normal connection between these organs still remains. There are many examples on record of such complete transpositions of all the viscera, without injury to the health of the individuals. An ingenious attempt has been made by Serres[1] to explain the cause of these transpositions. He states that his embryological observations lead him to infer that the liver is in fact a true centre, around which all the other organs range themselves in a regular manner. That the unequal developement of the two lobes of the liver, which are primarily equal and symmetrical, exercises a direct or indirect influence upon all the other thoracic and abdominal organs, and determines their definitive situation in both cavities: and that if the developement of the lobes of the liver deviates from the natural and ordinary course, a transposition of the thoracic and abdominal viscera necessarily results. The merit of plausibility may, perhaps, fairly be given to this speculation of M. Serres, but so far as I know it stands much in need of confirmation.

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[1] "Recherches D'Anatomio Transcendante," &c. p. 108, et seq.

The subject of hermaphrodism occupies from 60 to 80 pages in the work of Geoffroy St. Hilaire. All I can say is this, that although we see many instances of true hermaphrodism in the animal and vegetable kingdoms, no such cases have ever existed in the human subject; no human hermaphrodite, in the proper sense of the term, has ever existed; not a single so-called hermaphrodite in man has even been capable of performing the sexual functions of both sexes. All the alleged cases have merely arisen from various malformations, either of imperfectly formed men or imperfectly formed women. In consequence of malformations of the genital organs, girls have been educated for boys, and *vice versâ*. In several cases individuals who had been educated and looked upon as males have suddenly astonished the world by being delivered of children; and, in other cases, malformed men, who have been supposed to be women, have lived for many years as the wives of men, and the fact has not been discovered till death took place. The details of the various malformations which have led to these mistakes, are to be found in most works on physiology.

With respect to the frequency of monsters, so far as statistical accounts have been made, it appears that some kind of malformation occurs about once in three thousand births. We rarely find one anomaly alone. Sometimes the anomalies are of such a kind as to offer no impediment to the enjoyment of health; in other instances they lead to the speedy extinction of life.

Monstrosity is much more frequent in the higher than the lower animals: this fact admits of an easy and at least a very plausible explanation. The more complicated the organisation, the more stages of developement the various organs have to pass through, and the more likely, therefore, is their developement to be interfered with from various causes, than in the simply organised.

The birth of a child of monstrous formation is not usually to be anticipated by the occurrence of any particular symptom during the pregnancy of the mother. When the fœtus is of monstrous formation, the mother, generally speaking, is in good health, and has had well-formed children before. There is scarcely an example on record in which women have produced monsters at their first labour. Occasionally we may suspect that the fœtus in utero is of anomalous structure: for example, parents who are ill-formed are likely to transmit to their offspring the same organic characters which they themselves possess; but we are not to suppose that they cannot have children of natural structure. In some cases a knowledge of the previous pregnancies may afford us useful information. Some well formed persons have a sort of predisposition to give birth to children of anomalous formation, just as some parents who are healthy have a predisposition to give birth to children disposed to particular diseases. Thus, it not unfrequently happens that the offspring of young men and women who appear to be well formed and in perfect health, are all acephalous or consumptive. These facts are not capable of explanation.

Although in many cases no peculiar symptoms precede the birth of a child of anomalous structure, in others the mother, during her pregnancy, especially during the first months, has laboured under disease, or suffered from falls, or other bodily injuries, or powerful moral emotions. In such cases, it has frequently happened that the health of the mother has been speedily re-established, and there was every reason to hope that no mischievous effects had been produced. In other cases of the kind the mother has suffered more or less from the bodily or mental injury until the period of her labour.

Children who present some slight anomaly in their formation are usually born at the ordinary period of pregnancy, and their delivery is not attended by any remarkable circumstance. But the birth of beings of positively monstrous formation is frequently accompanied by circumstances which deserve attention. The birth of many monsters occurs before the usual period, and sometimes it is retarded beyond the natural term of pregnancy. Double monsters are usually born at the seventh or eighth month of utero-gestation, and, as might be imagined, the act of parturition is generally increased in difficulty. But still it appears that no species of monstrosity absolutely excludes the possibility of natural or manual delivery. The delivery of double monsters is, as might be expected, frequently long and laborious; but St. Hilaire knows of no recorded case of the kind in which the mother has perished during labour, or in which, for the purpose of rescuing her from impending danger, either the Cesarian operation, or embryotomy, was required.

The efficient causes of monstrosity.—Upon this part of the subject writers of the 16th and 17th century gave full play to their imagination, and accumulated many whimsical and absurd hypotheses. Monsters being, in their belief, entirely out of the pale of the general plan and ordinary rules of nature, they were compelled to have recourse to the influence of wonderful causes. Hence those extraordinary births which were attributed to the adulterous connection between men and beasts, from which deplorable and absurd prejudices some paid the price of their liberty, and others of their lives. Hence also the supposed intervention of the Deity, who was thought to create monsters for the purpose of astonishing or terrifying man; or of demons, the origin of evil, placed almost universally after the Deity, by the singular consent of the gross superstition of the people, most of the ecclesiastics, and even the philosophers of various sects. All these hypotheses, the product of the darkness of the middle ages, have long since ceased to have any influence; and even before the idea was maintained that beings of monstrous formation did not depart from the general laws of physiology, no trace of such speculations remained. The opinion gradually arose that both the causes and effects of monstrosity were simple and regular. And such, in fact, is the nature of all those causes of anomalies which have hitherto been proved by observation, and which are generally the hereditary transmission of monsters: diseases which have attacked the mother; violence inflicted upon her, especially upon the abdomen; and lastly, the influence upon the mother of some powerful moral emotion in the first months of pregnancy. St. Hilaire offers many interesting remarks upon some of these cases, and claims for his father the discovery and the demonstration of the remarkable fact, that there are certain monstrosities which are always produced by some mechanical violence inflicted upon the abdomen of the mother; namely, those in which the cranium is open, and in which the brain is deficient, and a vascular tumour exists in place of it. He states, that whenever it has been possible to learn all the circumstances of a pregnancy which has terminated by the birth of children thus monstrously formed, it has always been clearly proved that the mother had either suffered from some violent blow or long continued pressure upon the belly. In the few cases of the kind in which no external violence could be proved, the mother had suffered from some violent moral emotion, the immediate effect of which was a powerful and sudden reaction of the abdominal viscera; or she had suffered from some severe abdominal disease.

I cannot enter into the details of the cases related by St. Hilaire, in proof of his arguments upon this subject; to me they appear clear and convincing.

Connected with the subject of the efficient causes of monstrosities, there is another question of very difficult solution, and which has long excited the attention of physiologists, viz. the influence of moral impressions of the mother upon the fœtus in utero. The all-powerful influence of this cause would, no doubt, be one of the best proved facts in physiology, if the truth of an opinion could always be inferred from the number of its supporters, or the force of their conviction. In proof of the antiquity of the belief of the influence of the mother's imagination upon the young in her womb, the stratagem of Jacob, to increase the "party-coloured lambs" of Laban's flock, is referred to by all writers. Even in the present day, this doctrine is supported by many writers, and is more or less generally admitted by all classes of society. A few modern physiologists, indeed, have entered their protest against it, and are inclined to exclude, altogether, as an efficient cause of monstrous formation, the moral influence of the mother, which the elder writers regarded as certain and quite satisfactory. There can be no doubt that some anomalies originate from moral motions experienced during the course of pregnancy by the mother; and upon this subject St. Hilaire offers some, at least plausible, remarks. There are various kinds of moral emotions or impressions, no matter whether grave or gay, pleasurable or disgusting. Some are violent and sudden; others weak and momentary; others weak, but more or less permanent. Each different kind of influence upon the mind will produce different effects. This is confirmed by facts. Violent and sudden emotions of the mind very frequently produce as great bodily disturbance as mechanical injuries, and may, no doubt, cause imperfection in the structure of the fœtus. Many remarkable proofs of the truth of this theory are given by St. Hilaire, and numerous writers.

The influence of slight but permanent mental emotions of the mother upon the structure of the fœtus in utero, is not proved by facts equally convincing, but can scarcely be altogether discarded. There are not wanting well authenticated examples of malformed or even monstrous infants given birth to by women who had suffered during their pregnancy from long continued mental despondency and grief. The efficiency of such a cause to produce the alleged effect is too probable to admit of a hasty denial; but further than this we cannot go; we cannot admit the influence of slight and momentary moral impressions of the mother upon the fœtus. According to the popular belief, if a pregnant woman look at a particular object, is disgusted or frightened by it, and, above all, if she "longs" for it, it very frequently happens that the resemblance, both in shape and colour of that object, will be imprinted upon the body of the fœtus; and hence the popular rule, that a woman with child must have all her longings gratified, lest the child should be marked. In support of this belief you will find, in numerous writers, a very imposing array of so-called facts. But examine them closely, and you will also find the evidence upon which they rest is any thing but satisfactory. In cases of this kind the presumed cause of the "mark" or anomalous structure of the child, is never thought of until it is seen at its birth, and then, for the first time, some circumstance or another that occurred during pregnancy, is referred to as the cause of the mark or malformation. Still, as Dr. Blundell says, "in matters of this obscure and uncertain kind, to ridicule, without giving ourselves the trouble to examine, is at once petulant and unphilosophical;" and I refer you to two or three remarkable and authenticated cases, which he has recorded, which show a curious coincidence between impressions made upon the mind of the mother, and appearances upon the body of the child.

Thus, gentlemen, I terminate a confessedly brief and very imperfect sketch of the modern researches upon the subject of monstrosity. I have done, however, all I intended; and, if you will take my advice, as *students* you will go no further into this now very extensive subject. If you are inclined to approach it at a future time, you will find the works of St. Hilaire and Serres, which I have so frequently referred to, by far the most complete. The great and most striking faults of the former are dry and tedious details, fatiguing repetitions, and minute, and, in my humble opinion, very unnecessary divisions.

BIBLIOGRAPHICAL NOTICES.

Tweedie's Library of Medicine.[1]

This is the first volume of the Library of Medicine—edited by Dr. Tweedie—which we announced some time ago. It is intended, that there shall be a series of works on different departments of medical science. The first will comprehend "Practical Medicine," and of this series the volume before us is the first. The second will embrace practical surgery, and the third midwifery, the diseases of women, and the diseases of children, &c.

The other departments of medical science will be treated of in successive volumes.

The volume before us—which is a reprint from the London edition by the enterprising publishers Lea & Blanchard—embraces the following subjects and authors. An introduction on general pathology, by Dr. Symonds; inflammation, by Dr. Alison; general doctrines of fever and continued fever, by Dr. Christison; plague, intermittent fever, remittent fever, and yellow fever, by Dr. Shapter; infantile gastric remittent fever and puerperal fevers, by Dr. Locock; smallpox, by Dr. George Gregory; measles and scarlatina, by Dr. Burrows, and diseases of the skin, by Dr. E. Schedel.

It would appear, from the advertisement of the American publishers, that the subsequent volumes—some of which have been received—will appear in quick succession "should sufficient encouragement be afforded." We sincerely trust, that no difficulty will be experienced on this head. A work like the present—each volume, by the way, complete in itself—should be in the hands of every one who can afford it. Without the appearance of such productions from time to time, it is indeed difficult to keep pace with the changes and improvements that are taking place in pathology, and therapeutics, and he who would remain a routinist, unenlightened by the observation and reflections of others, must consent to be thought a laggard, and far inferior to his more industrious and enterprising brethren.

We can strongly recommend this series to the attention of all; not simply of the young, but of him who has grown gray in the service; and—as is too often the case perhaps—prides himself upon his own information derived from his individual experience, when a brief reference to works like the one before us would have spared him much strife after originality, and showed him the fallacy of many of his own inane speculations, and, possibly, inert or injurious therapeutical practices.

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[1] Dissertations on Fevers, general pathology, inflammation and diseases of the skin. By J. A. Symonds, M. D. Physician to the Bristol General Hospital, Lecturer on the Practice of Medicine at the Bristol Medical School, &c.; W. P. Alison, M. D. F. R. S. E., Professor of the Institutes of Medicine in the University of Edinburgh; Robert Christison, M. D., Lec. R. S. E., Professor of Materia Medica in the University of Edinburgh, and President of the Royal College of Physicians, &c.; H. E. Schedel, M. D., Paris; Charles Locock, M. D., Consulting Physician to the Westminster Lying-in-Hospital, &c.; George Gregory, M. D., Physician to the Small Pox and Vaccination Hospital, &c.; George Burrows, M. D., Assistant Physician and Lecturer on the Practice of Medicine at St. Bartholomew's Hospital, &c.; Thomas Shapter, M. D., Physician to the Exeter Dispensary, &c. Edited by Alexander Tweedie, Fellow of the Royal College of Physicians, Physician to the London Fever Hospital and to the Foundling Hospital, &c. Large 8vo. pp. 561. Philadelphia, 1840.

MISCELLANEOUS NOTICES.

Jefferson Medical College of Philadelphia.[1]—The published announcement of this institution contains an exposition from the faculty of the wholesome condition of the school, with an address from the Board of Trustees, who express their conviction "that at no time has the school been more effective, or more in a condition to fulfil the warmest hopes and expectations of its friends," that it "now presents advantages unsurpassed by those of other institutions," and that they feel satisfied "the institution is admirably calculated for a career of extensive and enduring prosperity." For the list of Professors, &c. we refer to the cover of the Journal.

To the announcement are appended the names and residences of *eight hundred and thirty-two individuals*, who have received their degrees from the institution.

Albany Medical College.—The catalogue and circular of the Albany Medical College, contains the names of 73 students, and 17 graduates for the session of 1839–40.

Digestive Organs of Infusoria.[2]—After careful microscopical observations of the digestive organs of infusoria, M. Meyen has arrived at the conclusion that the rounded bodies seen in these animals, particularly after the ingestion of coloured food, are not cœcal pouches, or stomachs continuous with the alimentary canal, as described by Ehrenberg, and believed by many able physiologists; but that they are isolated globules of ingested substance; moving freely in the abdominal cavity, and unrestrained by membranous parietes. These globular bodies were first noticed by Gleichen in 1781, after feeding infusoria with indigo and carmine, when he observed that the particles of each substance formed in a very short time globular masses in the interior of the animals. Ehrenberg thought he could trace a flexuous intestine along the course of these globules, which he has delineated in his splendid work. More recent observers have failed in their search for this intestine, but have seen the globules changing their position, and sometimes making a complete revolution along the internal parietes of the animal. M. Meyen explains their formation in the following manner. He says, that the particles attracted towards the buccal orifice by the action of cilia, are conveyed along the œsophagus to the stomach, where they are collected into a globular ball, and surrounded by a mucous secretion; that the stomach opens abruptly into the abdominal cavity without an intestinal prolongation, and into this cavity the balls are protruded, being connected with each other by the mucosity surrounding each successive globule; that when the abdominal cavity is filled with these balls, they are expelled through the anal orifice. The sacs which are seen in other infusoria are not, according to M. Meyen, stomachs, but cœcal cavities containing fluid, varying in size, appearing or disappearing under the eye of the observer, and having no communication with the exterior. They resemble cavities which are formed in the mucus of true cellular plants, particularly aquatic cryptogamia. If these views of M. Meyen should be verified by other investigators, and be found correct, the term polygastrica as applied to the class of infusory animalcules, will require alteration.

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[1] Jefferson Medical College of Philadelphia. Annual announcement of Lectures for the session 1840–1, with a catalogue of graduates of the institution. 8vo. pp. 16. Philadelphia, 1840.

[2] Abridged from the Edin. New Phil. Jour. in Lancet, May 16, 1840, p. 287.

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ART. I.—ON HYDROPHOBIA.

BY JAMES MEASE, M. D.

A case of hydrophobia that occurred recently near Holmesburg, Philadelphia county, and related in the North American by Dr. Willson, the attending physician, furnishes materials for a few remarks, which I hope will be found useful. There may probably be another reason for my "coming out" on the present occasion. You know Dr. Franklin long since said, that "nothing gives an author so much pleasure as to see himself quoted," and I presume the remark may be extended to his finding positions and principles which he first broached, supported, and confirmed by the frequent and subsequent experience of mankind. At all events it applies to myself on the present occasion. My own observations on the disease produced by the action of the canine virus on the human system, and the facts detailed in the recent, and a multitude of other cases which I had perused previously to the year 1792, when I wrote my inaugural dissertation on it, and since that date, had, and have satisfied me of the truth of the following positions, which I think may be received as hydrophobic axioms.—That neither the size of the wound, the age of the animal, wolf, dog, cat, or fox inflicting it, the stage of the animal's disease, nor the part of the body bitten, have the smallest influence upon the early or late operation of the poison, upon its virulence, the duration of the disease, or progress to its truly awful termination, which, notwithstanding all the modern and very great discoveries in physiology, and pathology, and a host of new remedies, never fails to take place. I could refer to cases enough in point to fill a page.

The case of Charles Baker, to which I have just alluded, under the care of Dr. Willson, is an instructive one, and is similar to that of the coloured boy Yorke, recorded by Dr. Physick in the 5th volume of the New York Medical Repository. 1. Both were bitten by puppies which they had been teasing; Yorke was wounded in one of his big toes, and Baker in one of his thumbs, and owing to the small size of the wounds made by the sharp pointed teeth of the animals, it is probable that in either case no more virus was inserted than is used of the cow-pock to vaccinate. 2. Both were unconscious of the cause of their affliction. When I questioned Yorke about the bite, he replied, with that quickness peculiar to hydrophobic patients, "oh, it was nothing—a mere scratch near my toe."[1] Baker's "thumb was tied up, the wound (as usual) healed, and he went to his business," and when indisposition appeared, he ascribed it to too much cold lemonade he had taken the day before. 3. From my inquiries respecting Yorke, I learned that after returning from market in the morning, he amused himself by teaching a puppy to fetch and carry for some time in the kitchen, and very probably switched or slapped it for not doing as desired; finally the whelp snapped at Yorke's toe, who then struck him with his hand and drove him out of the house, to which he never returned. Baker "amused himself by pinching the tail of his puppy, to make him show his agility by jumping, snapping, &c." I think, therefore, it may be conceded, that neither of the animals exhibited any indisposition previously to their biting, or the boys probably would not have disturbed them; if they had been sick, they would not have submitted to the irritating treatment they received, without early exhibiting marks of resentment, and using the constitutional mode of revenge to which they were finally driven by the idle conduct of their tormentors. The conclusion is that their saliva was rendered poisonous by reason of the passion excited in them. That persons have died of hydrophobia after receiving a bite from dogs when in a state of temporary irritation, and they remaining in good health after the death of the persons they had bitten, there can be no doubt. Several years since (1819) I had occasion to notice the fact in a paper on the disease,[1] when I recorded a case communicated to me by Dr. Joseph Glover of Charleston, S. C., and referred to two others, one noticed in the Edinburgh Med. and Surg. Journal, for 1817, and one in Dr. Bardsley's Medical Reports, who quotes the fact from the work of Martin Lister. In none of these cases is it mentioned that the dogs had been irritated previously to biting. If Dr. Glover can inform us on this point, in reference to the case he attended, I will thank him.[2]

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[1] Having visited Yorke with Dr. Physick at his request, I inquired minutely into his case, and have given the result in page 292 of the volume of the Repository mentioned above. The case occurred in the year 1801. Sixty-two ounces of blood were taken away by Dr. P. without the least diminution of the violence of the symptoms. I

It does not appear that any attempt was made to relieve Baker, although the unusual duration of the disease (six days) gave ample time for experimenting. Copious bleeding from the arm in the disease ought to be made an indictable offence, after the ample experience we have had of its total inutility, from the time of Boerhaave to that of the boy Yorke. Although a man may have a right to add M. D. to his name, he has no right in the sight of God, to "kill by license," and such is the phrase I should apply to a death by the disease after the experience of one hundred years against a remedy by the use of which a cure was attempted.

4. The case of Yorke proved the theory I first broached and supported in my inaugural dissertation respecting the cause of the horror of swallowing liquids, viz. the pain in the throat, of which the sufferers constantly complain in every attempt, and I explained the reason (p. 35) why in *some cases* solids at the same time were swallowed readily, as was observed in Baker. Fluids, I remarked, could not overcome the spasmodic action excited by liquids in the throat, and a convulsion is the result, while solids by their distending power overcome the stricture and resistance to their progress excited by the spasm, and thus descend into the œsophagus with ease. Dr. Physick adopts this explanation in his account of the boy Yorke, and adds, "in swallowing liquids the glottis must be closed by the action of its muscles, whereas by solids the epiglottis is pushed down mechanically so as to cover the aperture with little, if any muscular action." He proposes tracheotomy to relieve the difficulty of respiration from the spasmodic

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recommend the statement of Dr. P. and my own on the case to the inquirer on the disease. I there refer to another case of it (communicated to me by the late Dr. David Ramsay, of Charleston, South Carolina,) from a very small wound which had been forgotten by the sufferer and his family.

[1] Medical Recorder, Philadelphia, vol. 2d.

[2] The puppy from which Baker received his bite inflicted wounds the next day upon a man and a boy who, it is said, "were also fond of the sport of teasing," and then disappeared.

affection of the muscles of the throat; but it must be evident that this would only be a temporary remedy, and such he seems disposed to consider it. To cure the disease, one operating upon the system generally, or on a part which affects sympathetically the whole system of nerves and blood-vessels, must be used, and such I esteem *inflaming the spine with caustic potash* in the manner first adopted by Dr. Hartshorne of Philadelphia, and since by others,[1] with marked success in tetanus, which disease and hydrophobia I firmly believe have their main seat in the spinal chord.[2] Dissections leave no doubt on the subject, and it is to this its origin, and these parts only that medical men should direct their examination in a hydrophobic corpse. They may omit looking at the thoracic and abdominal viscera, for no appearances will there be found indicative of either the cause or the effect of the disease; all of them were perfectly natural in the boy Yorke. I would add cupping and leeching along the spine from the neck, to relieve the engorged vessels of the spine.

As the disease has never been cured, and the possibility of placing it under the control of the medical art is only hoped for by the numerous authors of systems on the practice of physic, and the faculty generally, what objection, I beg leave to ask, can be urged against a trial of the plan here suggested? He who may be so fortunate as to restore a hydrophobic sufferer to health, to absterge this medical opprobrium, would deserve and receive the everlasting thanks of mankind, and deserve and receive honour and profit from every civilized kingdom and republic on earth. Is not stimulus enough here offered to put in for so great a stake? Who will be the competitors for this noble prize?

So much for the cure; now for prevention.—Dr. Haygarth, of Chester, in England, long since, and first recommended the application of a continued stream of water upon the wound, and I have never omitted an opportunity to urge its use, from 1792 to the present time. The canine virus exists in a watery form, and water is its proper and natural solvent. If the wound be very small, it may be enlarged, but care must be taken not to inoculate the sound part below, by the penetration of the poisoned knife through the wound. A wash of chlorine in water, and more lately one of chloride of lime and water, has been advised on the principle of decomposing or chemically destroying the virus; and if at hand, they may be used—but no time, *not five minutes*, should be lost in procuring these remedies after a bite. Water is always at hand, and cannot fail of washing out the virus. As to cutting out the bitten part, or destroying the surface into which the virus has been inserted, by *caustic*, I could give another page of references to cases in which one or other of these remedies has been used, although under the most favourable circumstances, without success; and yet we constantly hear of their use, and never of the stream of water.

Philadelphia, August, 1840.

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[1] His mode is "to tie a piece of sponge to a fork, and after dipping it in a solution of the caustic in water, in the proportion of a dram to the ounce, to apply it rapidly along the spine twice, or thrice if the patient can bear it."

[2] For Dr. Hartshorne's paper see the Eclectic Repertory of Philadelphia, 1819; and for cases in which his remedy has been used with delightful success, see Med. Recorder of Philadelphia, vol. 2, and my paper there; also Gregory's practice of physic, *Philadelphia edition*, articles Tetanus and Hydrophobia.

For the American Medical Intelligencer.

ART. II.—CASE OF SEVERE WOUND OF THE ABDOMEN.

BY S. T. NEWMAN, M. D.

Amsterdam, Miss., July 8th, 1840.

Dr R. Dunglison:—

Sir—I send you the following case, which if you deem worthy of a place in your invaluable Journal, you will please insert, and oblige, respectfully yours,
S. T. NEWMAN, M. D.

On the night of the 25th of February last, I was called in great haste to visit Leven, a black man, residing four or five miles in the country, who I was informed had been engaged in a fight, and had received a stab in the abdomen. On my arrival, I found him lying on his back in a state of great alarm, supposing that his intestines were very much injured. Upon inspecting the wound, which was situated an inch and a half below the navel, and about a half inch to the right of the linea alba, I found it had been made by a stab or thrust almost directly inward. The wound was of small dimensions, corresponding with the instrument which had been used, which was a dirk knife, the blade of which was four inches in length. On examining the knife, it presented signs of blood three inches of its length. Protruded through the wound was a portion of the omentum or epiploon an inch and a half or two inches in length. The protruded omentum closed up completely the wound, and seemed itself to be in a state of strangulation caused by the contraction of the wound. There was no external bleeding, but when in attempting to probe the wound I accidently punctured the omentum, it bled freely for a short time.

I endeavoured to return the omentum into the abdomen by the orifice through which it had passed out, but so firmly was it grasped by the edges of the wound that I found this impossible. Nor could I ascertain whether or not any of the abdominal viscera were wounded. In this situation I hesitated for a moment, whether to enlarge the orifice or to cut away the protruded omentum, but at length decided upon the latter plan, and to prevent bleeding I placed a ligature around the omentum, and clipped it off level with the lips of the wound. Then (leaving the ligature hang out) I drew the edges of the cut together with adhesive strips, and confined the abdominal muscles with a bandage. The symptoms of which the patient now complained were, a dragging feeling about the stomach, and a disposition to syncope. After thus dressing the wound, I gave him an opiate to prevent the action of the bowels, and to secure a state of quietude. I then left him with positive injunctions not to move from the supine position, and to take nothing in his stomach, until I should see him next morning.

When I saw him on the following day, he complained very much of a dragging sensation about the stomach, and great pain in the back. His pulse was not such as to justify the abstraction of blood, being small, weak, and irregular. The soreness about the wound was insignificant. He was now put upon small doses of ipecacuanha so as slightly to nauseate the stomach, and thus exert an influence over the circulation, thereby preventing too great a tendency to inflammation. Nothing but small quantities of fluids was taken into the stomach.

On the 27th he seemed to be doing well, still complained of his back, but the sensation of dragging about the stomach was much less distinctly felt. On examining the wound I found its edges partly adherent. He had had as yet no operation from his bowels, so I ordered him an enema, still keeping him on small doses of ipecacuanha.

On the 28th, every thing seemed to be progressing favourably. He had had one or two stools, which I was sorry I could not see, as I was informed there was considerable blood passed with them. This, however, I was inclined to think was a mistake. When I next saw him, which was several days after my visit on the 28th, I found that he had taken up an idea in my absence that he was entirely well, and had been walking about paying no attention to the bandages, which had slipped below the wound. There was now a hard lump surrounding the wound of considerable size, but which appeared to be confined to the muscular portion of the abdomen. He was directed to resume his position on his back, and emollient poultices were applied to the swelling, and attention directed to keeping his bowels open. Under this treatment he was soon perfectly well.

S. T. Newman.

BIBLIOGRAPHICAL NOTICES.

Carey's Principles of Political Economy.[1]

We recommend this work—with a copy of which Mr. Carey has favoured us—to the attention of those of our readers who are interested, (and who is there that is not?) in the laws and movement of population. Mr. Carey has entered at some length into these interesting subjects—inquiring into the duration of life, the ratio of marriages to population, fecundity, emigration, &c. in different countries. We have thus far not had sufficient opportunity to inquire closely into the accuracy of Mr. Carey's computations. This we shall do hereafter. So far, however, as a superficial inspection will enable us to speak, they appear to be sound. The following summary will exhibit how favourable his results are to the United States, the mortality of which he is disposed to place at 1 in 50.

"We now submit the following view of the order in which several countries stand, as regards the several matters treated of in the preceding chapters, as well as in that essential requisite for prosperity, security of person and property.[2]

Security.	Duration of Life.	Growth of Population.	Marriages
1. U. States.	1. U. States.	1. U. States.	1. U. States.
2. England.	2. England.	2. England.	2. England.
3. Netherlands.	3. Netherlands.	3. Netherlands.	3. Netherlands.
4. France.	4. France.	4. France.	4. France.

Fecundity.	Mortality.	Emigration.	Efficiency of Labour.
1. U. States.	1. U. States.	1. U. States.	1. U. States.
2. Netherlands.	2. England.	2. England.	2. England.
3. England.	3. Netherlands.	3. Netherlands.	3. Netherlands.
4. France.	4. France.	4. France.	4. France.

Where person and property are most secure, production will be greatest, and the physical and moral condition of man will be highest; there will he be most disposed to contract matrimony, and there will the fecundity of marriages be greatest; there the unmarried adults will be in smallest ratio to the married, and the proportion of illegitimate children will be smallest; and there will the duration of life be longest. Such is the law which common sense would teach, and such is the law that is to be deduced from an examination of the operations of the world.

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[1] Principles of Political Economy. Part the third, of the causes which retard increase in the numbers of mankind. Part the fourth: of the causes which retard improvement in the political condition of man. By H. C. Carey, Author of an Essay on the Rate of Wages. 8vo. pp. 270. Philadelphia, 1840.

[2] See vol ii., chapters ii, iii, and xv.

"We have, it is true, confined ourselves to four nations, but a law that is true in regard to that number, will be found equally so in regard to the rest of the world. If we look to India, we find in Bengal, where security is established and taxation is comparatively light, a rapid increase of population, whereas in southern India, where security is of much more recent date, and taxation is heavy, the increase is very slow.[1] As regards most of the countries in Europe, we do not possess information sufficient for such an examination as would be necessary for the proof or disproof of the proposition we have offered. One writer informs us that Prussia doubles her population in 26 years.[2] Another makes it 39,[3] whereas the last census shows an increase of 34 per cent. in 21 years, according to which it would double in about 48 years. According to one,[4] Austria doubles in 44 years, whereas a second[5] makes it 53.6, while M. Dupin makes it 69 years. According to the Revue Britannique, France doubles in 125 years, whereas, agreeably to M. Dupin, the term is only 105 years. The first allows 84 years for the Netherlands, and the last only 56½, while M. Rau allows 74 years. Russia in Europe is said to double in 48 years, but the following facts will show how little is the dependence to be placed upon any such statements. In the most recent statistics of Russia,[6] we find the following information in regard to the government of Moscow. M. Storch gave it, in 1795, a population of 1,139,000. Wickman, in 1813, 1,246,000. Ziabloffski, in 1814, 935,800. Hassel, in 1829, 1,337,900, and M. Arsenieff, in 1831, 1,200,000. M. Schnitzler, with a view to obtain a correct idea of its actual amount, takes the population of 1796, adds thereto the births since that time, and deducts the deaths, by which process he obtains 1,462,884. He feels himself fully authorized to fix it at 1,300,000 souls.[7] The government of Vladimir, formerly part of that of Moscow, is stated by Wickman, in 1813, at 960,600; by Ziabloffski, in 1814, at 1,105,132; by Balbi, in 1826, at 1,335,000; by Hassel, in 1829, at 1,334,500; and by Arsenieff, in 1831, at 991,000. Pursuing the same course as in relation to the government of Moscow, M. Schnitzler deems himself authorized to fix it, *provisoirement*, at 1,100,000.[8] If such be the state of information in regard to the heart of the empire, what must it be in the remote districts? Even in England it is a matter of question whether the deaths are 1 in 47.2; 1 in 50; 1 in 54; 1 in 58; or 1 in 59. Such being the case, it must be obvious to the reader that we do not possess facts sufficient to warrant a belief of the existence of any other law than the plain and simple one that we have stated.

The case of the republic of Guanaxuato is frequently adduced as evidence of a different state of things. It is asserted that the deaths are 1 in 19.70, the births 1 in 16.08, and the marriages 1 in 69.76. In reference to this, we have only to say, that we do not know the fact, and that it will be time enough to reason in relation to it when it shall have been established. While Prussia and France, England and the Netherlands, are in dispute, it is highly improbable that we shall obtain returns worthy of confidence from Guanaxuato, Mexico, Peru, or Chili. In the meantime, we may rest assured that, with security and cheap government, population will grow, and that the growth of the one will be in the ratio of the enjoyment of the other. The growth of population may therefore be taken nearly as a measure of the productiveness of labour. Ireland, however, is usually regarded as proving the reverse of this proposition. In that country, the increase is now at the rate of 14½ per cent. in 10 years, at which rate it would double in about

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[1] Westminster Review, No. xlv., p. 118.

[2] Dupin.

[3] Revue Britannique, quoted by M. Villeneuve.

[4] Ibid.

[5] Professor Rau.

[6] La Russie, la Pologne, et la Finlande. Tableau Statistique, Geographique et Historique. Par M. J. H. Schnitzler, Paris, 1835.

[7] Page 39.

[8] Page 103.

50 years. It has been asserted[1] that the census of 1831 is incorrect, and that much of the apparent increase is due to the fact, that places are inserted in that for 1831, which were omitted in 1821. As there was no census previous to that of 1821 that could be relied upon, it is not possible to decide whether or not this assertion is correct. On a former occasion,[2] we gave a number of facts tending to prove that the average condition of the people of that country was superior to that of a large portion of those of the continent, and such, we are satisfied, is the case. There is, no doubt, much poverty in many portions of it, but there are also many portions of it in which great comfort is enjoyed.

"In the 30 years from 1801 to 1830, the population of Scotland increased from 1,599,000 to 2,365,000, at which rate it would likewise double in 50 years. The growth of improvement in parts of Scotland has been very rapid, but in other parts it has been exceedingly slow,[3] and, as a necessary consequence, we find a rapid increase of population in the former, whereas it has been exceedingly slow in the latter.

"No country in Europe has improved more rapidly than Norway in the last 20 years; and, accordingly, we find a rapid increase of population.[4] In 1825, it amounted to 967,959; in 1835, it had risen to 1,098,291,[5] being an increase of about 13½ per cent., at which rate it would double in less than 61 years.

"If increase of population be taken as a measure of production, and of the power of improving moral and physical condition, the following will be found to be the order of some of the most important portions of the world—

1. The United States.
2. England.
3. Prussia.
4. Scotland.
5. Ireland.
6. The Netherlands.
7. Norway.
8. France.

And at the foot of the list will be found Hindostan."

Rauch's Psychology.[6]

This book—for which we are indebted to its learned author—like the last, is not directly connected with medical science; yet it ought to be interesting to a body, the members of which have often been said to make the best metaphysicians.

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[1] Mr. Slaney, House of Commons, May, 1833, quoted by Wade. Middle and Working Classes, p. 552.

[2] See vol. ii., chap. xiv.

[3] Laing's Norway, p. 35.

[4] Ibid. p. 395.

[5] "The increase of population in Norway, connected, as it evidently is, with a proportional increase of property, by improved husbandry, and a value being given to its products by new employments, is a striking proof that population and property, if the latter be distributed through the social body on the natural principle, will mutually act upon and check each other. The increase of numbers, previously to the establishment of an independent legislature, was extremely slow, because the increase of their property was slow; it is now much more rapid, because the state of property admits of it."—*Laing's Norway*, p. 398. The establishment of a popular government enabled the people to control expenditure; taxes have been reduced, while the national debt has been paid off. Capital increases, and with it there is an increase of production. These products are distributed throughout the community on the natural principle, which gives to the labourer a constantly increasing *proportion* as the *quantity* is increased; his situation is constantly improving, and he has comparatively little hesitation about aiding in the increase of population.

[6] Psychology; or a view of the Human Soul: including anthropology, being the substance of a course of lectures, delivered to the junior class, Marshall College, Penn By Frederick A. Rauch. 8vo. pp. 398. New York, 1840.

Mr. Rauch's first two chapters consider the difference between man and animals, and life in certain of its manifestations; and the *first part* of his work is headed "anthropology,"—under which he considers the influence of nature upon man; the natural modifications of mind, produced by age, waking, sleeping and dreaming, and the power of the mind over the body—the *second part* being devoted to psychology proper.

We cannot—did our space permit—enter into an analysis of a work of this nature; but we may express our opinion, that it is a production indicating deep reflection, and one, which we recommend to the perusal of the younger part of our readers more especially. Most of the errors in medical practice are owing to an ignorance of the due relations between cause and effect. These errors, works—like the one before us—are calculated to dispel by stimulating to useful thought, which, as has often been said, is infinitely more difficult than to prescribe without reflection.

MISCELLANEOUS NOTICES.

University of Virginia, Medical Department.—The published catalogue of the matriculates during the last session exhibits a class of 49 students; a satisfactory number, considering the delay that took place at the commencement of the session in filling up the chair of medicine.

Yale College, Medical Institution.—The annual circular for the lecture term of 1840–1 contains the names of 15 graduates of the year 1839–40, and of three licentiates. The whole number of graduates since the first course of lectures in 1813–14 is 454; that of licentiates, 296.

Quarterly report of the obstetric practice of the Philadelphia Dispensary for Fourth, Fifth, and Sixth months, 1840. By Joseph Warrington, M. D., Accoucheur.—Twenty-six women have been delivered at full time, and one other attended on account of abortion at the fourth month of gestation.

Of the children born at full time, sixteen were girls, and ten boys.

The average duration of labour in twenty-two cases was nine hours—the extremes being one and fifty hours.

The average time required for the spontaneous delivery of the placenta in twenty-four cases, was about twenty-six minutes—the extremes being five and one hundred and ninety-five minutes.

In twenty cases of labour in which the presentations of the fœtus were carefully noted, eleven were in the first, seven in the second, one in the fourth position of the vertex, and one in the second position of the breech.

Abortion was brought on in the case referred to by external violence.

All the women have recovered without accident excepting one case, in which prolapsus uteri was brought on by rising and making exertion on the second day after delivery.

Of the children, three were still-born—one apparently in consequence of excessive hæmorrhage through the placenta situated at the os uteri—another appeared to have died in utero some weeks before delivery—and one died asphyxied, after the use of ergot to terminate a labour which had continued fifty hours.

The rest of the children have done well.

The forceps were successfully used to deliver in one case in which labour had continued forty hours—the child's head being strongly arrested in the pelvis in the fourth position.

Temperature of the human body in intermittent fevers. By M. Gavarret.[1]—M. Gavarret has made numerous observations on the temperature of the human body during the different stages of intermittent fevers, as well as during health, and from these it appears, that even during the stage of rigor the heat of the body is exalted from two to three degrees above its usual temperature. In the hot stage he has found the temperature still more elevated, but never more than one degree above that attending the stage of rigor; whilst in the sweating stage, though the temperature was above that of health, it was much below that of the two preceding stages.

Congenital cyanosis caused by the aorta originating from both ventricles of the heart. By Dr. C. F. Gravina.[2]—A boy, 9 years of age, pretty stout and well formed, was from his birth of a leaden colour, with his lips and nails blue, and suffered from a violent and continual palpitation of the heart, and short rapid respirations. On the least exertion these symptoms were much aggravated; to such an extent, indeed, as to force him to lie down, and not move in the least till the palpitations became calmed; at the same time the whole body became of a bluish colour, and was covered with sweat. When sitting or lying the child felt well, and could use slight exertion. On percussion the chest sounded every where clear. The respiratory murmur was heard distinctly by means of the stethoscope over all the chest; but in the precordial region two other sounds besides those of the heart were recognised. One of these abnormal sounds resembled the purring of a cat, and was heard during the systole of the heart; the other, which appeared to accompany the contraction of the auricles, was so clear and sonorous, that it was heard over the whole of the right side of the chest: on the left side, however, it was scarcely heard. When the boy was in a state of repose, his pulse beat from 78 to 84 in the minute; but on the least exertion rose to 100 or 105. The external veins presented neither turgescence nor pulsation. The abdomen was somewhat swelled, but soft; the liver appeared to be enlarged; but the functions of the intestines and urinary apparatus were normal. The boy died suddenly, in consequence of an attack of convulsions and dyspnœa.

On dissection of the body the following appearances were observed. The lungs were of a violet colour, regular in their form, and crepitated on pressure. The heart was of the usual size; the right ventricle was nearly twice as large as the left, but its walls were of their ordinary thickness; the left ventricle was smaller than common; the auriculo-ventricular openings in both ventricles presented their usual appearance; the foramen ovale was closed. The fleshy septum common to the two ventricles did not reach quite to the base of the heart, but was deficient at that point close to which the aorta originates, leaving a circular communication between the two ventricles. This opening was largest on that side which communicated with the right ventricle; but was somewhat contracted on that of the left. The aortic orifice was much dilated, as were also the semilunar valves, which appeared proportioned to the increased dimensions of the aortic orifice. The pulmonary artery was very much contracted, but its walls were unaltered. The liver was very large and hypertrophied. The spleen was normal.

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[1] L'Expérience, No. cvi. 1839, and Edin. Med. and Surg. Jour., April, 1840, p. 519.

[2] Schmidt's Jahrbucher, July 1839, and Edin. Med. and Surg. Journal, April, 1840, p. 522.

Disease of the posterior columns of the spinal cord, sensation remaining unimpaired.[1]—Mr. Edward Stanley brought before the Royal Medical and Chirurgical Society of London, a well marked case of disease, strictly limited to the posterior columns of the spinal cord, yet producing phenomena at variance with the doctrine of the distinct influences of the anterior and posterior columns of the cord on the faculties of motion and sensation.

The disease, which was not the result of injury, commenced about three years before the patient's admission into St. Bartholomew's Hospital, with impaired motion of the lower extremities, at first slight, but progressively increasing, so that at the time of his admission he could only succeed by a great effort in raising his legs from the ground whilst sitting on a chair. Before death, the loss of motion became complete in each lower limb, throughout its whole extent. In no part, however, was there any defect of sensation, scratching, pricking, or pinching the skin, being attended by sensation as acute as in a sound limb.

On dissection, no signs of disease presented themselves excepting in the spinal chord. Here, contrary to the anticipations of many persons by whom this case was observed, no disease whatever was found in the anterior columns of the chord. An extensive change of structure and colour was, on the contrary, manifested in the posterior columns, from the pons to the lower end of the chord. "The value of this case, says the author, consists in the distinctness of its phenomena being acknowledged by many competent observers to have been such as they are recorded."

Dr. Budd related a case where similar phenomena were observed. A patient who had caries of the spine, lost the power of motion in the inferior extremities, the power of sensation remaining entire. On dissection ,the anterior columns of the spinal chord were found apparently sound, whilst the posterior, at the seat of the disease, were softened and nearly fluid.

New and successful treatment for the prevention of hydrophobia. By Dr. Miroff, of St. Petersburg.[2]—Dr. Miroff strongly recommends the following treatment to be followed by those who have been bitten by rabid animals, asserting that it has been so successful in his hands that in not a single person who had been subjected to the treatment was hydrophobia developed. His paper on the subject contains the narration of many cases of persons who had been bitten by rabid dogs and wolves, and though many of them had been closely observed for more than a year, no bad results had followed the bite. His treatment is continued for the space of two months. As soon after the bite as possible, the person is put into a vapour bath of 50° Cent. and given to drink a strong decoction of sarsaparilla and guaiac, whilst the wound is rubbed with the ointment of the red precipitate of mercury. Two pints of this strong decoction is ordered to be drunk daily, and the sore is dressed till it heals with the above ointment. The patient has a bath every other day during the first week, every third day during the second and third week, and then only twice a week till the two months are past.

On the treatment of phthisis by hydrocyanic acid. By M. Forget.[3]—Professor Fantonetti, of Pavia, a short while ago, published a paper on the curative effects of hydrocyanic acid in chronic inflammation of the lungs, but more especially in phthisis. He related a number of cases where not only were the lungs tubercular, but large caverns were detected, accompanied by hectic fever and marasmus, and yet these cases recovered perfectly in the space of from fifteen days to three months; a result he attributed entirely to the administration of the hydrocyanic acid. The acid which he used was prepared according to the process recommended by Magendie, and was administered in doses of two drops, progressively increased to fifteen.

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[1] London Med. Gazette, February 7, 1840, and Edin. Med. and Surgical Journal, April, 1840, p. 524.

[2] L'Ami de la Santé, and Edin. Med. and Surg. Jour., April, 1840, p. 525.

[3] L'Experience, 14th November, 1839, and Edin. Med. and Surgical Journal, April, 1840, p. 526.

M. Forget, who doubted the accuracy of the results obtained by Professor Fantonetti, repeated the experiments in eight undoubted cases of phthisis, but was forced to arrive at a very different conclusion. In three of the cases death took place with as much rapidity as if the disease had been left to its natural course. In the five others, no amelioration was noted in the progress of the symptoms, with the exception of a slight alleviation of the cough in two cases; but in these cases vomiting was induced. Many of the patients also complained of wakefulness.

M. Forget repeated the same experiments on eight other patients, with the same want of success.

On penetrating wounds of the heart. By J. A. Jobert.[1]—Three interesting cases of penetrating wounds of the heart are related, where the persons lived after the receipt of the injury from twelve hours to no less than ten days. In all the cases the wound of the heart was indicated by a peculiar whizzing sound, precisely similar to that which exists in varicose aneurism; and from its presence being recognized in all these three cases, M. Jobert thinks it might be regarded as a diagnostic mark of the presence of a penetrating wound of the heart. He relates several cases which have been published by other authors, where persons had lived for years after this organ had been wounded, opportunities having in many of these cases occurred of confirming the diagnosis by examination after death. He regards, therefore, a wound of the heart as not necessarily fatal, and gives numerous directions of the mode in which the treatment may be best conducted. Of these, bleeding, both general and local, the local application of cold, and the administration of such remedies as tend to reduce the force of the circulation, and abate the tendency to hemorrhage, are the chief.

Sciatic neuralgia cured by section of the sciatic nerve. By M. Malagodi.[2]—A young man, about 30 years of age, suffered for many years from violent sciatica, which every remedy failed to relieve. The pains became every day more and more severe, so that he at last insisted on amputation of the thigh being performed, in order to afford him relief. A more simple operation, however, fortunately succeeded. An incision of about two inches in extent was made over the course of the sciatic nerve, about four finger breadths above the popliteal space; the nerve was then carefully exposed and cut across. The section caused excessive pain, and the patient fainted. When he recovered, he complained of a painful creeping feeling over the whole limb. A portion of the nerve of about an inch long was then cut away, but the doing so caused no pain. The inflammatory and other symptoms which followed required the employment of general and local bleeding, the strict antiphlogistic regimen, antispasmodics, &c. The patient was able to walk by the fiftieth day after the operation, but complete cicatrization of the wound did not occur till the end of the fifth month.

Before having recourse to this operation, M. Malagodi made a number of experiments on dogs, of which the following are the results.

1. That section of the sciatic nerve at the upper portion of the inferior third of the thigh causes paralysis and consecutive atrophy of the muscles, but is not followed by gangrene.

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[1] Archives Generales, Sept. 1839; and Edin. Med. and Surg. Journal, April, 1840, p. 528.

[2] L'Expérience, 21st November, 1839; and Edin. Med. and Surgical Journal, April, 1840, p. 531.

2. That this paralysis extends from the middle of the leg to the points of the toes.
3. That the leg is still useful as a support to the body, and for the ordinary purposes of locomotion, seeing that the muscles which move it are not paralyzed, and that the knee joint remains sound.

Mortality from phthisis at Naples.[1]—In a late number of the Filiatre Sebizio, M. de Renzi controverts the conclusions concerning the mortality by phthisis at Naples, to be found in a paper presented by M. Journé to the Academy of Medicine at Paris. The sum total of phthisical patients received into the hospital of incurables during the years 1835–36 and 37, is reduced by M. de Renzi from 2969 to 2775; and he shows that of this number only 1846 belonged to Naples and its suburbs, the rest consisting of strangers who come to die there. This gives an average of 615 instead of 989, which was M. Journé's supposition—a considerable difference, particularly if the probabilities of medicine are to be based on figures. Then subtracting the catarrhal affections, or those which resemble phthisis, M. de Renzi fixes the number of phthisical patients at 600, which, in a population of 400,000, gives one in 666. We must add, however, 200 patients belonging to the middle and upper classes, which will make 800; and of these 560 die, or 70 per cent. But, as the ordinary mortality is 13,000, the proportion of deaths from phthisis is about 1 in 23.

The mean mortality at the hospital of incurables is 1800, and the number of deaths among the phthisical patients belonging to the town is 430; so that these deaths form a quarter of the total mortality in the institution. But, if we consider, first, that at Paris, more than a third of all patients are treated in the hospitals, and hardly a fifth at Naples; secondly, that at Paris, the number of consumptive patients received is equal to those suffering under other diseases, while at Naples the latter are much fewer in proportion, it will be allowed that a comparison is difficult. This being settled, if in the hospitals of Paris, as Bayle has demonstrated, and M. Journé laid down, one-third of the patients die of phthisis, and this number is more than a third of all the deaths in the whole town; if, on the other hand, in the hospitals at Naples, less than a quarter of the patients die by phthisis, and if, even adding the patients who do not belong to the town, we do not reach a third, as at Paris; if the phthisical patients in the hospital include nearly all in the town, whilst the deaths in the hospital are but a sixth of the general mortality, it necessarily follows that the patients who die of phthisis are in proportion to those who die of other diseases, as 1 to 4 at Paris, and 1 to 12 at Naples. Hence the climate of Naples, far from favouring the developement of the disease, makes it rarer than it would naturally be in a town of small size relatively to its population, who are in consequence crowded. If we consider, moreover, that scrofulous affections are very common there, we must necessarily conclude, that the number of consumptive patients does not exceed the natural proportion to those afflicted with scrofula.

As to the important question whether a phthisical patient from a cold or northern climate may experience benefit in a more temperate one, M. de Renzi answers it in the affirmative, and says he knows it from his own experience. But if the disease has already made great progress, if the disorganization of the lungs is much advanced, and the tubercles have begun to soften, a southern climate is of no avail. In such cases the poor patient travels but to perish on a foreign shore, far from his relatives and friends.

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[1] Gazette Medicale, December 20, 1839; and Edin. Med. and Surgical Journal, April, 1840, p. 535.

On the injurious qualities of menstrual blood, and on its probable causes. By Dr. Remak, of Berlin.[1]—This paper is chiefly useful for the information it affords respecting the composition of a fluid which few have either the inclination or the liberty to examine. The author adduces but little fresh evidence in support of the universal popular belief that menstrual blood can produce urethral discharge or other affections of the male genital organs; but he thinks that the occasional occurrence of these symptoms, of which he has no doubt, depends on the condition, not of the blood, but of the mucus with which it is mixed.

By microscopical examination of the menstrual fluid under various circumstances, he found that whenever it had a red colour, it contained blood globules, and that the intensity of its colour depended on their number. At the beginning and towards the end of its flowing, when it is pale and whitish, it contains a preponderating quantity of laminæ of epithelium and of mucus corpuscles, but their quantity becomes proportionally less and less as the fluid presents more blood globules and a deeper colour. The author believes that this mucus which is constantly present in the menstrual fluid, may, like the secretions of all mucous membranes when in a morbid state, possess the power of producing a similar morbid state in other membranes of the same kind. He relates a case which confirms this idea: a very obstinate gonorrhœa, in which the menstrual fluid of the only female with whom the patient had connection, and in whom there was not the least probability of gonorrhœa existing, contained an abundance of thin pearl-coloured mucus. Connection did not produce the gonorrhœal symptoms except when the female was menstruating.

On the various circumstances which appear, in the course of diseases, to produce the curved form of the nails. By M. Vernois.[2]—This paper is sufficient to determine the value, or rather the want of value, of curved finger nails as a sign of disease. The results, obtained from the examination by the numerical method of 276 cases of various diseases, are as follows:

In any collection of patients, whatever be their diseases, curved nails will be found in at least one third. Among different diseases, phthisis, scrofula, and other chronic affections, have a very marked, though not an absolute or constant influence. Of 88 patients with curved nails, 70 were phthisical or scrofulous; and of 188 with normally formed nails, 40 were suffering from the same conditions. Of the same 88, nine only laboured under acute diseases. Females present this alteration about three times more frequently than males. It is most commonly observed between the ages of ten and thirty. Occupation has no influence upon it. The constitution which coincides with it in five sixths of the cases in which it occurs is that which is marked by a pale, fine, and anæmic skin, blond hair, blue or brown eyes, bluish sclerotica, very long eyelashes, and weak muscles.

Remarkable case of Ischuria renalis, of nine years' standing, with vicarious vomiting of urine. By F. L. Kreysig, M. D., Dresden.[3]—S. B., æt. twenty-five, six years after the commencement of menstruation, began to complain of abdominal pain, general spasm, and difficulty in voiding urine and fæces, succeeded by orthopnœa, and symptoms of thoracic and abdominal inflammation, which were treated antiphlogistically. The bladder required the frequent use of the catheter. The patient suffered pain in the right knee, and was obliged to keep it drawn upwards towards the abdomen.

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[1] Medicinische Zeitung, Dec. 25, 1839; and Br. and For. Medical Review, April, 1840, p. 545.

[2] Archives Générales de Médecine, Nov. 1839; and Br. and For. Medical Review, April, 1840, p. 548.

[3] Hufeland's Journal, July, 1839; and Br. and For. Med. Rev., April, 1840, p. 551.

Two years after, the legs began to swell, respiration became still more difficult, the urinary secretion *ceased*, and the patient vomited a fluid containing, according to chemical analysis, the principles of urine.

M. Kreysig now detected, in the right iliac region and near the spine, a tumour extending towards the liver, exquisitely painful to the slightest touch, and which the patient had noticed for four years. The bowels were invariably costive; and twice a day (5 A. M. and 6 P. M.) urinous vomitings occurred, preceded by dyspnœa, so urgent as twice to require V. S. No urine was found in the bladder. Tepid baths, and mercurial and stimulating liniments to the region of the kidney, were recommended. During the time the patient was in the baths, the skin exhaled a very fetid odour. The tumour gradually enlarged, and grew softer.

The patient now returned home, and four months after (January 24, 1835,) informed M. Kreysig that the tumour had daily increased, become harder and more painful, and pointed in the epigastric region. Fluctuation was now evident, and in three weeks the abscess broke, during a violent spasm, discharging a large quantity of pus, which was soon after succeeded by an increase of suffering. In about six weeks, the urinous vomitings ceased, and urine was voided by the bladder. Shortly afterwards, the pain being then more than usually intense, with an urgent desire to evacuate the bowels, the patient expelled, per anum, a mass about as large as a goose's egg, resembling fat mixed with pus, and intolerably fetid. From this period, all abdominal swelling and pain ceased, and menstruation returned. In about three quarters of a year, the health was entirely restored, not one of the former symptoms remaining.

On the treatment of dysentery with albumen. By M. Saucerotte, Physician to the hospital at Lunéville.[1]—The dysentery which annually attacks a considerable number of men of our garrison, affected only thirteen in the months of October and November, 1838, and ten in those of August and September, 1839. I employed in some of these cases the albuminous method of treatment recommended by MM. Bodin de la Pichonnerie and Mondière. Comparatively with those by the ordinary method (by antiphlogistics and opiates,) the results obtained by it were really of the most striking kind. My own experience and that acquired by others in the hospital shows that when the disease is at all severe, it generally lasts two or three weeks, sometimes becomes chronic; or terminates in death: besides this the reiterated application of leeches causes severe pain, the administration of enemata is continually attended with much difficulty, the convalescence is prolonged, and attended with extreme weakness when the disease is not stopped during the first week. Judging from the cases I have observed, the albuminous treatment is attended with precisely contrary effects—rapid cessation of the symptoms, quick convalescence, and recovery of strength, while the administration is attended neither with pain nor any sort of inconvenience.

[The albumen was exhibited both as a ptisan and in enemata, according to the formula of M. Mondière, and eight cases are related (some, however, with ludicrous brevity) in support of the above emphatic encomiums. In some of the cases there was undoubted inflammation of the large intestine; in all frequent bloody stools, tenesmus, &c.]

On the treatment of synovial tumours by subcutaneous incision. By M. Barthelemy.[2]—This mode of treatment was suggested by the very slight local or general disturbance which has been found to succeed the sections of muscles even of considerable extent, when the skin over them is not divided. The operation consists in raising a fold of the skin near the tumour, and passing a long thin lancet-shaped knife under it to the left side of the swelling, which is then by a sweep of the instrument split into two portions. The instrument is then withdrawn by the same narrow aperture at which it entered, and care is taken that no air should pass along the track of the wound. The fluid which the cyst contains diffuses itself into the surrounding tissue and soon disappears, leaving, it is presumed, no chance of the relapses which are common after every other mode of treatment.

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[1] Gaz. Médicale de Paris, No. xlvii., November, 1839; and Br. and For. Med. Rev., April, 1840, p. 552.

[2] Gazette Médicale, Dec. 7, 1839; and Br. and For. Med. Rev., April, 1840, p. 554.

The operation has been performed with success, and with no subsequent ill effect, by MM. Barthelemy, Marechal, and Malgaigne.

Cure of an old dislocation of the humerus by division of the pectoralis major, latissimus dorsi, teres major, and teres minor muscles. By Professor Dieffenbach.[1]—Herr Th. a large landowner, upwards of thirty years old, had his right shoulder dislocated two years ago by a fall from his horse; the nature of the accident was not at first recognised, and afterwards, though all the usual means were adopted by several surgeons, the bone could not be returned to its place. The patient, therefore, came to Berlin; he was of a gaunt, powerful form, with a pale complexion and but little fat, and his muscles were strong and prominent under the skin. The injured right shoulder was an inch higher than the left; the acromion formed a sharp angle; on the outer side the shoulder was deeply hollowed, and the scapula lay flat. The right arm was thinner than the left, and stood out far from the body. The head of the humerus lay on the anterior side of the chest, close to the clavicle, and two inches from the upper portion of the sternum. The patient had a constant sensation of cold in the limb, and the creeping which he had formerly felt had ceased. The pulse in the right radial artery was rather weaker than that in the left. The limb was useless, and only the hand could perform some slight actions.

By moving the arm in different directions, severe pain was produced in the part where the head lay surrounded by a thick wall of dense ligament into which it had worked itself. In drawing the arm outwards from the body, the pectoralis major, latissimus dorsi, teres major, and teres minor became tense with extreme pain. The last three of these muscles felt hard and tense, even when the arm was not drawn outwards. An attempt to reduce such a dislocation without dividing these muscles and the new joint would have been extremely dangerous, and had been found impossible; but (says the professor) I anticipated success from the subcutaneous division of every thing that resisted me.

The patient being placed on the table, with one folded sheet passed under the right axilla, and held by six assistants, another fastened round the right hand and held by six more, and a third round the upper part of the humerus held by three more (in the manner usually adopted by me in old luxations), the two first sets of assistants were ordered to pull against each other. I next bade them make a slowly increased extension, and then stop; I then passed a small scythe-shaped knife through the skin, and divided the most tense portion of the pectoralis major close to its tendon, which yielded with a cracking sound. I then again introduced the knife at the posterior border of the axilla, and divided one after the other the latissimus dorsi, the teres major, and the teres minor. All these muscles gave way with a cracking noise, which was increased by the resonance of the chest. I next passed my knife into three places by the head of the humerus, and divided in a similar manner under the skin the dense and hard false ligaments which surrounded the new joint, and, lessening the extension, I loosened the head by a few rotations.

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[1] Medicinische Zeitung, Dec. 18, 1839; and Br. and For. Med. Rev., April, 1840, p. 555.

A powerful extension was now again commenced on both sides, and the three assistants behind the patient pulled suddenly while I conducted the humerus towards the joint, into which it slipped on a sudden, without again springing out. One shoulder looked now just like the other. The thorax, the shoulder, and the arm were enveloped with bandages which were soaked with paste, and after a few hours they all became dry and hard, and prevented any motion of the right side.

The bleeding from the wounds, which were not larger than those made in phlebotomy, was at most a few drops. No unpleasant symptoms ensued, and the patient suffered even less than the majority of persons in whom I have reduced old dislocations. On the ninth day I took off the bandage; both shoulders had exactly the same level and form, and there was neither swelling nor pain. The punctures in the axilla had completely healed, and scarcely a trace of them could be found; there was no collection of blood or pus. The arm was already capable of motion, and its actions were far less hindered than they are sometimes after the reduction of recent dislocations; because in them there is often for a long time a sensitive contraction of the unnaturally stretched muscles, while in this case the division of the resisting muscles and of the newly-formed joint not only rendered the reduction possible, but at the same time diminished its after consequences. The limb is now again restored to perfect utility.

The professor adds, that he had lately occasion to reduce a luxation of the foot backwards of upwards of a year's standing, by dividing the tendo achillis, which forcibly drew the heel upwards. This limb also became useful again.

Observations on diffuse inflammation. By Henry Kennedy, M. B.[1]—This is an elaborate essay on a very important subject. We regret that we have only room for the conclusions which Dr. Kennedy considers as warranted by the investigation entered upon by him. They are as follow:—

1. That diffuse inflammation will not attack a person in perfect health.
2. That the bad state of health preceding diffuse inflammation is powerfully caused by anxiety of mind, by great bodily fatigue, by shocks of the nervous system, by improper diet, or by any thing which has a tendency to lower the general healthy tone of the system.
3. That this deranged state of the health is shown principally in a vitiated state of the bowels.
4. That when once this unhealthy condition is established, the slightest cause is capable of inducing diffuse inflammation.
5. That venous inflammation does not necessarily cause diffuse inflammation.
6. That venesection may cause diffuse inflammation, the vein, however, remaining healthy.
7. That when venous inflammation does exist, the fever which accompanies it is more likely to be of the typhoid type than when diffuse inflammation exists alone.
8. That diffuse inflammation may attack several parts of the body in rapid succession, or it may be confined to one part, as the hip, or one organ, as the lung.
9. That pus may be poured out into the joints, serous cavities, or cellular structure, without any appearance of surrounding inflammation.
10. That, at the very onset of the attack, the free application of the actual cautery holds out a fair probability of checking the disease; but, when once formed, free and deep incisions are the only treatment on which any reliance can be placed.

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[1] Dublin Journal, Jan. 1840; and Br. and For. Med. Rev. 1840, p. 578.

THE

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Art. I.—CASE OF MERCURIAL PERIOSTITIS, TREATED BY THE PHYTOLACCA DECANDRA.

BY J. B. JONES, M. D.

Circleville, Ohio, August 1st, 1840.

Professor R. Dunglison,

The following case, which lately occurred in my practice, I send you an account of, thinking you may perhaps judge it worthy of a place in your valuable periodical. Yours, respectfully,

John B. Jones, M. D.

J—— P——, aged 24, of rather lymphatic temperament, four years ago was exposed and contracted syphilitic disease, as he supposed,—there appearing a small ulcer upon the prepuce about the size of a fourpence, of rather an indolent character. At this time he applied to a physician, who prescribed blue pill, without any benefit to the ulcer; there was nothing like indurated glands, or any discharge from the urethra; he continued the use of the pills for three months, during which time he took upwards of 400 six grain pills, still continuing to work hard on the farm. At the expiration of this time, he became much worse, with loss of appetite, feverishness, pains in his limbs, nodes on both tibiæ and cranium; he would pass from four to six nights without sleeping. At this period, a change took place in his medical attendants, who again treated him with mercurials, guaiacum, and sarsaparilla, with no apparent benefit, except when he took the small doses of calomel; he again changed his physician in hopes of a cure, and was ordered the balsam of copaiba, squills, opium, uva ursi, and mezereon, without any better success. He was visited by a fourth physician, who ordered a decoction of *arctium lappa,* alternated with mercurial purges and guaiacum, which relieved him somewhat; he again relapsed, when another medical attendant was sought, who, in addition, directed the acetate of morphine and the warm bath. The opiates had the effect of quieting the irritability and lulling the pain, so that he could pass the time more comfortably: this last adviser having moved away, his fourth physician was again called, with two others, who decided upon using small doses of corrosive sublimate, increased to a very considerable extent, which again relieved him somewhat. He continued to pass his time in this manner, when I visited him in company with one of his physicians in May last; he was then much emaciated; face somewhat bloated; pains in both knees and ankles; nodes on the shafts of both tibiæ; his cranium would have bid defiance to the scrutiny of a Gall or Spurzheim, so much was it deformed; appetite bad; respiration natural; skin dry and hard; urine scanty and high coloured; he was in the habit of taking large opiates to procure any alleviation of his suffering, and when the opium was withheld he would cry like a child.

This case was viewed as secondary syphilis by all his medical attendants, and treated accordingly, with the result detailed above. After investigating the case from the commencement, I decided it to be periostitis from injudicious use of mercurials, to which two of my medical friends agreed. The next problem to be solved was, what could be done that had not already been done by professional men, eminent for their practical and scientific attainments? I considered this a fair case for the exhibition of the *phytolacca decandra.*

In the first place, I withheld the opiates, and gave the extract of stramonium in grain doses, increasing it half a grain every day as long as the system would bear it, with laxatives; he continued the use of the stramonium pills for three days, when they could no longer be borne, which had the effect of breaking up the habit of taking opium. I then procured ten pounds of the recent root of the phytolacca, and boiled it in half a gallon of water, until about a quart remained. This decoction being strained, and some spirits added to prevent fermentation, I ordered a wine glassful three times a day. This agreed pretty well with the stomach; producing a prickling sensation over the whole surface, and acting slightly on the bowels. He had not taken the decoction more than two days when his appetite returned; the pains were scarcely felt; slept comfortably; he continued their use for one week, then left off for some length of time;—this and exercise on horseback have so far restored his shattered constitution, that he can walk about the farm, ride to town the distance of three miles, and is evidently convalescent.

I do not think that the stramonium had any effect but to break in upon the habit of the excessive use of opium; for after its exhibition the patient continued in the same condition until the decoction had time to act:—I think physicians have not given the phytolacca in sufficiently large doses.

ART. II.—CASES OF HYDROPHOBIA, OR RABIES.

BY ALEXANDER KILGOUR, M. D.[1]

No cases of hydrophobia had occurred in Aberdeen, or the northeast of Scotland, in the memory of any inhabitant, until the present year, (1839,) when the following cases of it made their appearance. In the month of March considerable alarm was created by a bitch which was running about through the streets, and bit a considerable number of persons; but it was ascertained that the animal had been deprived of her puppies; and her ferocity was ascribed to this as its cause. She was destroyed; but, in consequence of the excitement produced, the magistrates directed that no dog should be allowed to appear on the streets without being muzzled; and those found without the muzzle were taken to the watch-house and destroyed, or their owners fined. The muzzles used were leather straps, a part of which goes round the head of the dog an inch or two above its nose, and prevents it opening its mouth to half its usual extent, or protruding its tongue. To save the expense of a muzzle made by a saddler, many of the poor people had their dogs' heads confined by pieces of cord or tape fastened tightly round them. Those not muzzled were confined at home, being generally tied up; or were led about by their owners on the streets with a string attached to them. In consequence of the alarm, and from the measures of security which were enforced, dogs were shunned, and when met with loose, they were hunted by boys until they were irritated, and then being declared mad, they were pursued until destroyed, or got clear of their pursuers. Whether from this system of hunting and baiting them, or that they really were diseased, and had, as usual when affected with rabies, run themselves to death in obscure and unfrequented places, there can be no doubt that several dogs were found dead within a mile or two of the town, and of these some had previously been seen running wildly about the country. Many rumours went abroad of strange dogs having been observed affected with disease, and of their biting others; but nothing could be gathered of a definite nature when these reports were investigated.

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[1] Edinb. Med. and Surg. Jour. April, 1840, p. 340.

In the three cases following, the history of the bite is given as far as could be ascertained. The first case, as well as the third, proved fatal at the patients' own houses; the other was admitted into the Infirmary, under the charge of my colleague, Dr. Dyce, who has furnished me with the report. I leave the third case to speak for itself. I did not see the patient in life, but there is no doubt on my mind, nor I believe on that of the medical gentlemen who attended her, that it was a decided case of hydrophobia.

I have nothing to offer in regard to the pathology of the disease or its treatment. I believe we are as far as ever from having any satisfactory understanding of the one, as we are from possessing means of ensuring a successful issue in the other. There are two points, however, common to two of these cases, the second and the third, that they took place in individuals of a particularly nervous temperament; and that the most careful *post mortem* examination in the first case, and in the second to the same extent, except that the spine was not opened, discovered to us absolutely nothing that we could connect with the previous symptoms. Could any thing be gathered, in a physiological view, from the fact that all these patients, when pressed to take fluids, demanded a spoon with which to convey them to the mouth; and that they preferred taking substances in the state of pap, for example, porridge and milk, and bread and milk, or tea with biscuit soaked in it, to either solids or fluids? In Dr. Dyce's patient, I observed, on my carrying a small white earthenware vessel with water in it towards the patient's bed, that he began to move his mouth and throat before I offered it, as if in the process already of deglutition, or rather mastication, and what he took from me was in small mouthfuls, and swallowed as if after mastication, instead of a steady draught.

Case 1.—Thomas Alison, aged 10, residing at Footdee, of a healthy appearance, and described by a most intelligent person in whose vicinity he resided, and who daily saw him, as a remarkably smart and clever but tricky boy, was bit on Friday, the 10th of May, by a dog. The dog had at one time been domesticated in the same neighbourhood, but had afterwards been taken into the country for a few miles, where he had been bitten by another strange dog, and on getting back to town on the day mentioned, had visited his old quarter. There was no reason for supposing at the time that he was diseased, and he was not previously considered vicious. A man in the building-yard, which he entered, was patting him, and the boy Alison put down his hand for the same purpose, when the dog bit him in the wrist.

The boy's mother stated that he was much alarmed from the bite, and that, since that time, he has been often disturbed in his sleep, rather fretful, and not as usual amongst the rest of the children. She washed the wound with spirits, and applied poultices. On the 21st May, he went into the harbour in a boat, and losing his oar, became very much excited, and screamed until some persons went out to his assistance, and brought him ashore. But, residing close to the harbour, he was much accustomed to boating in it, and his mother stated that his situation would formerly have been in no way alarming to him. On Wednesday, the 29th May, she observed that he was unusually dull and inclined to sit by the fire. She thought his stomach was disordered, and gave him of her own accord a calomel powder, and on the following morning a dose of senna infusion. On this day, Thursday, the 30th, he was first observed to have spasms. On Friday, at seven in the morning, Dr. Cuddie was sent for, and informed that the boy had hydrophobia. On visiting him, he was satisfied that such was the case; and he bled him and gave him some purgative medicine, and after that calomel and opium. At a few minutes past one of the same day, I saw him along with Dr. Cuddie and Dr. Ogston.

The instant we entered the room, and passed the end of the bed, which was close to the door, but covered, the boy started up with a scream, and placed himself in a sitting position in the farthest corner of it. My impression at that instant, and all the time I saw him, was, that I had never seen any thing like his appearance, but that of a child who had been greatly frightened, and not recovered from the fright. His countenance was anxious and unsettled, but not flushed or cadaveric. The predominant expression was that of extreme fright and terror. His eyes had a peculiarly unsettled but not wild expression. In a few seconds he was reconciled to our presence, but frequently sprung up to the sitting posture with a scream, and put his hand to his throat, as if he were choking, at the same time throwing his head up, as if he wished to inhale deeply. He would then handle or move the bed-clothes, but without any apparent determinate object; then sigh frequently and deeply, and become quieter. In a few minutes, again, the same was repeated. Sometimes he raised himself more than half out of bed, but raised his chin as if to lengthen his neck, and carried his hand to the throat and the breast. At these times there was an evident catch in the breathing, or difficult inspiration. There was in the intervals of these spasms of the throat jactitation of the body, and twisting of the mouth, particularly drawing down of the angle of the mouth on the same side as the bite. He very frequently gave something between a sigh and a moan; he retched occasionally, and brought up a frothy fluid like saliva, which was adhesive and stringy. Whatever he did was in a hasty manner: and his question "*Fat*," Aberdonice for *what*, when he did not understand us, was given in a startled way, not that he was frightened at us, but as if under fright from some other cause. On offering to touch him, he started up to the further corner of the bed; but, in an instant, on telling him that we wanted to feel his arm, he put it out to us. The same took place on offering to touch any part of his body; but on coaxing him a little, he took my hand, and conveyed it himself, first to his left arm-pit, and then to the back of his neck; but he had the greatest sensitiveness in regard to touch, and no deliberate examination of any part could be made from his restlessness and uneasiness. When questions were put to him, he spoke sensibly, but hurriedly, and always as if in alarm. He appeared to take no interest in the conversation we had with his mother as to the history of the case, nor to regard our presence or look much at us, the frequent paroxysms keeping him in a constant state of alarm and pain. There was no matter or inflammatory redness about the scars on the wrist. His pulse, as far as could be ascertained, was very weak and rapid, about 120; the skin was cool; he had made urine, and his bowels had been fully opened; he had vomited (he told Dr. Cuddie) all his medicine. His mother stated that he had had a swelling in his arm-pit two or three days before, but, as far as he allowed examination, nothing of the kind could be felt. The blood taken in the morning was in a dark clot, and so soft that the probe could not raise it, but passed through it. A tin tumbler of water was offered him, which he rejected with a start; but on again coaxing him, he agreed to take a drink, provided he got a spoon and a plate. He then took two or three spoonfuls of the water into the plate, and took a spoonful of the fluid from the latter, which he swallowed. His hands shook much, and he darted the spoonful to his mouth suddenly, after having as it were made up his mind to swallow the water, but immediately after retching and vomiting took place.

Before we left him I poured some water from a height on the plate without his seeing me, and he instantly projected his hands in a supplicating attitude, with a countenance of extreme terror, and then buried himself under the bed-clothes. Dr. Cuddie stated the symptoms to have been the same in the morning, but that the pulse was stronger and the spasms more frequent. In the evening, at half past seven, he was taking some porridge and milk; but his pulse was scarcely to be felt; the skin was cold, and his face was congested. He was also somewhat delirious, and inclined to be talkative, and rather witty with Dr. Cuddie, whom he best knew. He died about 11, in one of the paroxysms, according to his mother's statement.

The body was examined by the same parties, and Mr. Fraser, surgeon, nineteen hours after death.

The throat, chest, abdomen, head, and spine, were most carefully examined, but nothing particularly deserving notice observed. The tongue was indented on the sides by the teeth, and there was some adhesive mucus on the palate. The glottis and pharynx were natural. The spaces betwixt the rings of the trachea were somewhat vascular. The œsophagus was pale as usual, except close to the cardiac opening, where the tint was pinkish. The mucous coat of the stomach was marked by some spots composed of close red dots. The intestines, particularly the colon, were much distended with air, and giving out the smell of turpentine, of which he had an enema.

The lungs were rather congested. The heart contained semi-fluid blood in both ventricles. The liver was natural.

The kidneys were rather vascular.

The brain was natural; or if any change, it was that the great commissure and *corpora striata* were rather soft. Bubbles of air were observed in the veins; and not half an ounce of fluid in the brain. Some fluid was found in the theca of the spinal canal. The chord was in some places more vascular than usual; but as to this all were not of one mind.

The body was pale; the lips rather blue; the joints stiff. The largest scar was close to the wrist on its internal and anterior side. It was jagged and irregular on the edge. On laying open the part, it was found to be placed over the ligament binding down the tendons, and immediately over the ulnar nerve, but not penetrating to it. There was no purulent matter, nor signs of inflammatory action. The other scar was on the back of the metacarpal bone of the thumb, but was healed up, or left only a slight mark. It was found immediately over the posterior branch of the muscular spiral, but there were no appearances of the bite having gone through the cellular tissue. The nerves were perfectly healthy, and no appearance of any inflammation of the absorbents in the arms was recognised. There was no swelling in the arm-pit.

Case 2.—G. G., aged 28, married, a stout, muscular farm-servant, was admitted into St. Nicholas' Ward about 2 P. M. on Monday, the 12th August, 1839, with symptoms of hydrophobia.

He stated, that on the 7th of July, on attempting to tie up a dog, which was supposed to be unwell, he was bitten in the right fore-arm near the wrist, and in the fore and upper part of the right thigh. To both wounds caustic was freely applied soon after the injury, and they were then dressed with basilicon and poultices until they healed, which took place in about a fortnight. He then remained free from complaint, excepting a degree of weakness, until the 7th of August, (five days ago,) when he felt occasional sharp pains in the fingers and right arm, extending towards the *axilla*, with numbness and diminution of power in the whole extremity. He continued at his work, however, until Saturday, the 10th, when the pain in the arm increased, and extended to his neck. He then applied for medical aid. He was ordered a dose of calomel and jalap, with a mixture containing *Mist. Camphoræ*, ℥iii.; *Solut. Muriat. Morph.* ʒi. *M.*, of which he was to take a table-spoonful occasionally.

On Sunday (11th) he was restless from oppression about the chest, with some sense of choking. He had not taken the mixture as prescribed; the powder had operated well; the pain in arm was less severe, but the arm was still numbed. His appetite was good, and he ate on this night a hearty supper before going to bed. He had not been asleep long when he was awoke by an oppressive sense of choking, from a feeling as if a lump lay at his chest, with increased pain in the right arm, and which he distinctly described as extending to his throat and chest, with almost total loss of power of the extremity. When he got up to drink some toast and water to quench his thirst, which was very urgent, he found he could not swallow it; and when he again tried and succeeded, the effort was followed by so severe a paroxysm of agitation, choking, and profuse perspiration, as, to use his own words, "almost destroyed him." He slept none after this, and continued restless.

When first seen on admission into the hospital on the 12th, he was being fed by the nurse (out of a white vessel) with bread and milk, of which he was reported to have swallowed, though with difficulty, some spoonfuls. He complained much of want of sleep; was tranquil in manner; occasionally sighed deeply, but without irregular breathing; said the cold air annoyed him, and requested the door to be kept shut, and then gave the foregoing account of his complaint.

He expressed no disinclination to take fluids when offered him; but it was evident the resolution produced anxiety; and when the vessel was brought near him, his eye glistened, and his frame and manner became agitated and flurried, but without actual spasm. The impression on my mind at the moment was an unwilling compliance, or wished for evasion of the question, as he entreated in rapid succession not to be hurried, to give it in a spoon, and that it should be warm. Warm fluids produced less uneasiness than cold, and solids less than either. The cicatrices presented nothing unusual; they were very slightly tender, of a deep purple colour, without induration, and partially covered with a loosely adherent scale. Both arms were numbed, particularly the right or bitten arm, with which he was unable to lift any thing. He could, however, raise it to his head when requested. He had no numbness or uneasiness in the lower extremities. The pulse was about 100; tongue covered with a thick, tenacious, white coating, but moist; the body was covered with perspiration.

℞. *Camphoræ; Calomelanos a.* gr. iii.; *Opii Pulv.* gr. i. *M. Ft. pilul.* ii. *statim sumendæ.*

8 P. M. He had several short sleeps. From the first he awoke agitated and alarmed, from the others quietly. He took some warm bread and milk with a little difficulty, but shrunk from cold water. He thought himself not so well. Had frequent eructations during the visit, which, each time, was followed by a slight tremor and uneasy motion of his body. On requesting him to drink, he was thrown into violent agitation before it had approached him, attended with catching and deep hurried inspirations, and he begged us to desist. Shortly after this he swallowed one or two spoonfuls hastily, and with much difficulty, perspiration continuing profuse. The tongue and pulse were much as at last report. He was ordered two pills containing *Culomel.* gr. iv. *Opii*, gr. ii. *Camphor.* gr. iii. every four hours, and the following liniment to his back and breast: *Tinct. Opii.* ℥i. *Spt. Camph.* ℥ss. *Aq. Ammon.* ʒii. *M.* A turpentine enema was directed to be given.

August 13, 9 A. M. Had taken six of the pills ordered last night, and he had slept several times quietly though shortly until 5 A. M. when he took the last pills. Soon after this he was attacked with violent spasmodic retching, with a copious flow of glutinous frothy saliva from the mouth, mixed with dark streaks, apparently blood. He complains much of a disagreeable taste in mouth, with a sense of burning at epigastrium and throat. The breathing not so hurried or oppressed, neither has he the same dread of liquids, having, he says, helped himself to some cold water. A pill of croton oil and crumb of bread, ordered at 6 A. M. has only now been taken, after much persuasion and increased difficulty. Feels inclined to eat, but positively refuses to take more medicine. The enema produced no effect. Pulse about 120; tongue more furred; sweating still profuse.

Noon. He is reported to have taken some biscuit soaked in tea, with little difficulty, and continued quiet and tolerably comfortable until half past 11, when the retching and flow of saliva returned. Has talked at times incoherently, affirming that he has been poisoned, and all around him have conspired to murder him. At present he is quiet, but his expression of countenance is more anxious; spoke sensibly; and, when requested, took a spoonful of water with less apparent reluctance and difficulty than last night; pulse 130. He was directed to have immediately a teaspoonful of laudanum, to be repeated every third hour; and a purgative enema. About an hour after this, whilst I was visiting the other patients in the ward adjoining his closet, he became violently agitated, threw himself about in bed, talking loudly and incoherently, while the frothy saliva flowed copiously from his mouth, but without retching. The perspiration ran from his face. This attack appeared to have been brought on by an occurrence in the ward,—a patient having suddenly expired, whose last shriek he appeared to associate with the cry of his child, about whom and his wife he raved. The paroxysm soon passed off, and he became submissive, lay with his eyes half closed, and swallowed a teaspoonful of laudanum with little persuasion or difficulty. In the afternoon had several similar paroxysms of agitation. The laudanum was repeated, but was immediately rejected. The pills and the enema he positively refused. About 6 P. M. he vomited a considerable quantity of a blackish fluid, resembling coffee-grounds, after which he lay in a state of collapse for about five minutes, when the whole body (right arm excepted, which was uncovered, and hanging over the side of the bed,) became cold, and covered with a clammy sweat. About 7 P. M. the same symptoms returned, with a similar termination, and again about twenty-five minutes to 8 P. M. when, at the close of the paroxysm, he ceased to breathe. In the intervals between the vomiting, he was at times composed and spoke sensibly, but more generally raved on the old theme of being poisoned; but during the whole time he knew and called those around him by their names.

An inspection was not granted by his friends.

Case 3.—2d October, 1839. Mrs. D——, aged 52, married, the mother of a family, and of sober and regular habits, but of a nervous temperament and easily excited, had been complaining of what she thought was a cold since the afternoon of Thursday, 26th September, on which day she received a fright from a cat destroying a favourite bird of her son's. On Saturday, the 28th, she was out at market; and on that day she told her family that she was dying, and requested them to send for medical advice to save reflections.

When visited on Sunday at 4 o'clock, she was found complaining of difficulty of swallowing, especially fluids, attended with occasional fits of dyspnœa, and inability of remaining at rest in bed. On offering her any thing, she felt a great sense of choking and suffocation, and she snapt at what was offered to her, or took it in a hurried and jerky manner. She had a great terror at liquids, although she complained of much thirst. Her pulse was not quick, but weak; her mouth clammy.

On Monday (30th) she was in much the same state; slept very little, and when she did so, always awoke with a sense of suffocation. She preferred sitting up by the fire to being in bed. Bowels opened by laxative medicines. Had been ordered an antispasmodic mixture.

Tuesday (1st October). Spasms and excitement worse, but with difficulty had swallowed a little biscuit and tea. Was continually talking, but answered questions distinctly. Fancied she saw persons about her; had no sleep; had the same horror when any thing was put to her mouth, and snapt at it as before. At 1 o'clock she was in a convulsive fit, with twitchings of eyelids and cheeks, and mouth open, with the tongue partially protruded. She died at 3 o'clock, forty-seven hours from the period she was first visited.

The body was examined twenty-one hours after death. In the brain every part was natural, except that the left thalamus was internally of a slightly pinkish hue, and the consistence not, on the whole, so firm as the other one. The *velum interpositum* was more than usually vascular, and this state was very remarkable in the situation of the pineal gland. The veins in the *pia mater*, where it enters the fissure of Sylvius, were very tortuous and large, but empty.

The viscera of the chest were natural. The only thing deserving notice in the abdomen was, that the stomach was remarkably small. Its mucous membrane, and that of the œsophagus, were quite healthy.

On considering all that we had observed in this inspection, and taking the symptoms, a few of which had been mentioned to me by the medical gentleman who attended her, in our walking to the house, (the above history having been furnished by him the day after,) I was struck much with the case. From her peculiar temper, it had been looked upon as a nervous affection, or a case of hysteria; but it was stated by the friends that the woman herself was acutely sensible of her horror at liquids, and that she had repeatedly told them she could not take them, but would make the attempt, and that the manner she did so was such as to astonish them all. She had also complained much of the cold air when moving the bed-clothes about her; but they had not observed any thing particular in her appearance, nor heard her make any complaint on the door being opened. The husband also stated that she had retched often, and that what she brought up was froth and "like soap-suds."

I had observed a little dog on entering the passage of the house, and had asked them if the dog was theirs. The husband said that they had had a dog, but that it died about six weeks ago. They could not say what was the matter with it, but it drooped, and could not eat or drink, from its tongue being protruded, and so swelled that it could not get it back into its mouth. It was not vicious, and never had bit any one, nor been bit. In its illness it paddled with its mouth in water put down to it, but could not lap it up from the state of its tongue. It slavered much. The woman was extremely fond of it, and nursed it on her knee frequently. I examined her hands, but saw no scratches or sores. On further inquiries being made at the husband and sons two days afterwards (the woman having been buried), they stated that the dog had come home some time before its death with a cut in its head, but whether by a dog or not they could not say; and they also stated that the deceased had a sore on her arm, which she was in the practice of making the dog lick, in the belief that the doing so would heal the sore.

It was apparent that the friends believed the woman's death was connected with the dog; but they wished it kept quiet, and it was with considerable reluctance they gave the preceding statement.

Art. III.—MONESIA.

BY A. D. CHALONER, M. D.; AND BY W. S. W. RUSCHENBERGER, M. D., U. S. NAVY.

Philadelphia, September 18th, 1830.

Dr. R. Dunglison,

Dear Sir,—The following notes on a new vegetable substance, called "*Monesia*," which I had collected, if of any service to you, are at your disposal. Hoping that in them you may find something to repay for their perusal, I remain

Your obedient servant,
A. D. Chaloner, M. D.

During the last winter I received, through the politeness of Dr. Joseph Warrington, (the skilful and accomplished accoucheur of the Philadelphia Dispensary,) a specimen of the bark of a tree from Chili, with a fluid extract of the consistence and colour of tar, made from the bark. The bark was called by the Chilians "*killeai*" or "*quillai*" bark, and the extract was used by them as a *soap* for the ordinary purposes of washing. Not having leisure to examine the extract, I deferred the analysis of it until the summer; in the month of April, I obtained some of the "Extract of Monesia" for the purpose of arresting a profuse discharge of blood, in a case of menorrhagia of seven weeks' duration.

On examining the monesia, I was struck with the resemblance between the extract that I had received from Chili and the monesia; and on evaporating the fluid extract by means of the sun's rays, a substance was obtained resembling the monesia in every particular. Dr. Martin St. Ange, in his paper on monesia, observes "that the extract of monesia is prepared in the country from the bark of a tree, whose botanical name is not known;" on examining the "Histoire Naturelle du Chili, par M. l'Abbe Molina, traduit de l'Italien, et enriche de notes, par M. Gruvel, D. M., I find the following description:

"*Monoecia—Polyandria—Quillaia*—Masc. cal. 4, phyllus con. o. stamina 12. Foemin. cal. 4, phyllus. con. o. Styli 4. Caps. 4, locularis, semina, solitaria. Folia alterna, ovato-oblonga, indivisa, denticulata, sempervirentia, petiolata. Pedunculi axillares. Flores masculi et feminei in eadem ramo. Calyc. foliol. oblongis, persistentibus. Stam. capillaria long. calycis. Antheræ subrotundal. Germen subrotundum. Styli subulati. Caps. subquadrata."

Quillaja Saponaria.[1]—"The Quillai (quillai saponaria, gen. nov.) This tree, whose trunk attains more than the middle height, is covered with a thick bark of an ashy gray; it is divided at the top into two or three branches, which bear leaves like those of the green oak; the flowers are the same as respects the stamens, but the seed is enclosed in a quadrangular capsule. The wood of the *quillai* is very hard, and difficult to be split; it is on this account that the peasants make stirrups of it; but what makes this tree more valuable to the Chilians, is *the bark, which being pulverised and mingled with a sufficient quantity of water, foams like soap, and has the same effect in removing grease from woollen and other stuffs.* The commerce which is carried on with this bark is considerable; the Peruvians, especially, import a large quantity. The name of the tree is derived from the Chilian word *quillean*, which signifies to wash."

The bark which I have received from Chili accords with the above description of the *quillai* in every respect. *Monesia*—its properties:—it is soluble entirely in water—nearly insoluble in pure alcohol—is incompatible with the following substances: acetate of lead, corrosive sublimate, salts of iron, iodine, ferro-cyanuret of potassium, the pure alkalies, potassa, soda, and ammonia—which I have ascertained by experiment. Its watery solution is decidedly acid, turning litmus paper to a bright red colour. The taste of monesia is peculiar: first sweet, soon astringent, then acid, and finally pungent and permanent, especially in the fauces; it also thickens the saliva—if, when in the state of a fine powder, it be snuffed up the nostrils, it causes violent coughing and sneezing. I have used the monesia, in the form of pill (3 grs. each), in menorrhagia[2] and dysentery, given every two or three hours according to the violence of the disease,—as an ointment, in the proportion of 8 grs. of monesia to ʒj of simple cerate, in herpes labialis, with effect,—also the tincture, in the proportion of 30 grs. to f℥j, as an application to indolent ulcers and scrofulous abscesses.

After the external application of the monesia, either in the form of an ointment or tincture, severe pain and smarting ensues, which passes off, however, in about fifteen or twenty minutes. The watery infusion has been used with success in tinea capitis,—the Chilian ladies wash their hair with it, making the hair silky and smooth.

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[1] This description I have translated literally.—A. D. C.

[2] Vide Medical Examiner, vol. iii. pp. 207, 215, &c.

Respectfully, yours, &c.
A. D. Chaloner, M. D.

My dear Sir,—I regret that I have not yet heard from my friend Dr. Styles on the subject of the extract of quillai, which is supposed by Dr. A. D. Chaloner to be the same article as monesia, which has attracted so much attention in Paris.

I spent the first half of the year 1827 in Chili, and there became acquainted with the quillai bark, and though I was told it was used medicinally by the Indians or aboriginal natives, I never learned any thing in relation to its specific application. As I have stated, it was known more for what might be considered its domestic virtues than medicinal qualities. On my return from Chili in the autumn of 1829, I brought some of the bark to this city; but I do not know that I was the first who did so. I spent parts of the years 1831, 2, and 3 on the coast of Chili, and when I left Valparaiso in October, 1833, the extract of quillai was not known there. I brought home with me a very considerable quantity of the bark, for the purpose of causing experiments to be made with it, to ascertain whether it might not be useful in the arts; and about the same time several tons of the bark were imported into Baltimore. In April, 1835, I received a letter from my friend Dr. J. Styles, of Valparaiso, informing me that a foreign pharmaceutist had prepared an extract from the quillai, from which he hoped to derive great benefits, if experiment should prove the extract to be a valuable medicine, as was suspected. As I was on the eve of departure from the United States, I was not able to cause its virtues to be tested as I had been requested to do.

When in Chili in 1837, the fluid extract of quillai was not in general use as a medicine; but chiefly known as a cleanser of woollen and silk stuffs, and a promoter of the growth of hair. Its application was not more extended than the bark itself, which is not used for common laundry purposes in Chili—at least not upon the coast; perhaps for the reason that the tree does not sufficiently abound in the country to render its bark procurable at an expense which would bring it into competition with soap.

M. Bernard Derosne describes the bark from which the monesia is prepared as of a deep brownish-red colour, and presenting a clean fracture (see page 3 of his brochure.) How far this description applies to the bark of the quillai, and to the dry extract prepared from it in Chili in 1834 or 5, you can judge by the specimens which I herewith send for your acceptance.

I have employed a cold infusion of the bark in several affections of the skin of mild character, and as a wash for indolent ulcers with advantage; and in one case it proved to be an effectual remedy for itch.

"The quillai is the bark of the *quillaja saponaria—Molina*, a large tree growing at the foot of hills and in the mountain valleys of Chili. When the bark is broken into small pieces, and infused in cold water, it forms a suds similar to that of soap. With this the ladies of Chili are in the habit of washing their heads, once in about ten days; they say it preserves the scalp from dandruff; it certainly gives the hair a very clean, glossy appearance. Besides, it is also useful for cleansing cloths, silks, and crapes from grease, without injuring either their texture or colour; and it is sometimes used as a medicine."[1]

The quillai bark is brought to market in bales, or rather bundles, containing each from one to two hundred or more pounds. The bark is in pieces of from three to five or six feet long, from two to eight inches wide, depending very much upon the size of the trunk from which it may have been stripped. The tree grows sometimes to the height of 40 or 50 feet, having a diameter at the ground of from one to two feet.

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[1] Page 100, "Three Years in the Pacific," Carey, Lea & Blanchard, 1834.

Externally the bark is rough, and of a deep reddish-brown colour; its internal surface is smooth, of a cream white, which darkens by age; and when recently dried, is almost entirely covered by minute crystalline particles. When broken, the inner bark is found to be tough, compared with its outer covering, and may be stripped into ribbons and pliant shreds several inches in length. The interstices of its fibres seem to be full of an almost impalpable powder, which is cast out when the bark is fractured, and when brought in contact with the lining membrane of the nose, excites sneezing, and sometimes a slight sense of stricture about the fauces. Its taste is peculiar; at first slight, then sweetish, warm, and finally leaving an unpleasant impression upon the fauces like that produced by chewing senega, which endures for some time. The old bark floats in water until it becomes thoroughly wet, when it sinks. If steeped in cold water for eight or ten hours, in the proportion of a handful of shredded or coarsely powdered bark to a gallon of water, it produces an infusion of the colour of common ley, which, when agitated, presents upon the surface a resemblance to soapsuds.

From what I have seen of the effects of this cold infusion, I should be disposed to give it a fair trial as an injection in leucorrhœa, with an expectation of very decidedly favourable results—probably more remedial than those which have been derived from a similar application of the monesia in this affection.

The means of verifying the experiments made by Dr. Chaloner are at hand in this city; and it is to be hoped that those who have the opportunity will not fail to seize upon it, to set the question at rest, whether monesia and the extract of quillai are prepared from one and the same tree. It may be discovered, perhaps, that monesia consists of extract of quillai with an addition of glycyrrhiza, &c. My own experience does not warrant me in expressing a decided opinion upon this suggestion.

Very respectfully and truly yours,
W. S. W. Ruschenberger,
41 South Eighth street, Sept. 1840.

Professor R. Dunglison.

Art. IV.—ON HYDROPHOBIA.

BY JAMES MEASE, M. D., PHILADELPHIA.

Dear Sir,—Your statement in page 170, of the "New and successful treatment for the prevention of hydrophobia," by Dr. Miroff, of St. Petersburg, demands a notice. Let us endeavour to lay open the mystery of the disease, although we cannot cure it.

No possible objection can be made to the treatment Dr. M. prescribes, because all other modes have failed; the way is therefore clear; but part of the prescription is not original, viz. dressing the wound with the ointment of red precipitate of mercury; the use of which can only be to keep the wound open, and thus favour the discharge of the canine virus. The *probable* benefit derived from the practice has repeatedly been experienced by persons bitten, who have been enabled to keep up a drain from the part for some time. I say, and *italicise* the word "probable," because no man can with any but a shadow of propriety, ascribe his success in the prevention of the disease to any internal or local treatment, when it is known that not one in twenty of those bitten takes the disease. Such is the chance for an escape, and such is the calculation of mortality from a bite, formed from ample experience. A policy of life-insurance of a bitten person might be based upon this datum. It has, moreover, often happened that persons bitten by a dog paid no attention to their wounds and remained well, while others bitten by the same dog, and treated by excision of the part or caustic, died of the disease.[1] Besides, if Dr. Miroff had been familiar with the facts on hydrophobia, he would have known that "one year or more" was not enough to test the infallibility of his or any treatment; for the virus has remained much longer inactive in the system, and yet was roused into action with fatal effect. Very old medical authors assert that fifteen and even twenty years and more have elapsed between the reception of a bite and the appearance of the disease; to these long intervals, however, I must demur; nevertheless, I gave credit to and have recorded one undeniable case, in which three years and four months intervened after a bite until the symptoms appeared.[2] If, then, I should be asked why longer intervals cannot be credited, I can only reply, that there is no record of a case of the genuine disease having appeared after the virus had remained inactive for such long periods as just mentioned; the mere *ipse dixit* of the old medical authors will not be received as truths in the present searching age. "What can we reason but from what we know?" There can be no question of the interval between the bite and the disease of three years and four months, and until it is clearly ascertained that a longer interval has occurred, we must set down the first of those periods as the limits to our belief of the inactivity of the virus. How it happens that a poison so inveterate and uncontrollable when it does operate, should remain so long dormant in the system, and even sometimes when other acute diseases have been sustained and treated during its quiescence, is one of the mystéries of the animal economy well worth investigating, and one that would form a proper subject for the Boylston (Boston) annual prize, or for a prize from the learned body, the College of Physicians of Philadelphia.

In the year 1818, the *Alisma plantago* was strongly recommended, in an express treatise, by a Russian counsellor of state, as a remedy for the disease, on the *authority of a peasant*, who was said to have been very successful in the treatment of it. This is a common marsh and ditch plant of Europe and the United States. In the year 1821 was published the plan of treatment by Dr. Marochetti, of Russia. The chief theory upon which he laid great stress was, that the virus is conveyed in full force to the two sublingual glands, one on each side, between the genio-glossi muscles, the lower jaw, and the inner membrane of the mouth, which immediately covers them, and that the virus is conveyed to the extremities of two or three secretory ducts proceeding therefrom, forming one or two small tumours of unequal size, which are to be opened by a lancet, and a few drops of sanious lymph evacuated and spit out. The mouth is then to be washed with a decoction of genista (broom). Dr. M. says he too was indebted for a knowledge of the discovery to a *Russian peasant*, who had been very successful in the treatment of the disease.[3] A due estimate of the authority to be attached to such a source of medical instruction as a Russian peasant, of whom not one in ten thousand can read or write, and are probably as ignorant and stupid as any inhabitants of the earth, may be easily formed. The Alisma and Dr. M.'s method of treatment appear to have had their day. I have not seen the particulars of any cases treated by either the first remedy or the last plan, and I presume I never shall. Dr. Miroff's is the third Russian mode of treatment, the merits of which, at least in the United States, remain to be ascertained, for I must enter a caveat against reported cases from Russian physicians or Russian peasants.

JAMES MEASE.

Sept. 23d.
Professor Dunglison.

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[1] See my paper "On Snake-Stones and other Remedies for the Prevention and Cure of Diseases from Snake and Dog Bites," in Coxe's Med. Museum, vol. v. p. 1.

[2] Med. Repos. New York, vol. v. p. 298.

[3] Med. and Phys. Journal, New York, vol. i. p. 117. 1822.

BIBLIOGRAPHICAL NOTICES.

Gannal's History of Embalming, by Harlan.[1]

This work forms an octavo of 264 pages, neatly bound in boards, and, together with numerous additions, may be purchased at a price much less than the original could be imported. Mr. Gannal's process has already been introduced into the great anatomical schools of Paris. The Montyon prize has been awarded to the author by the National Institute; he was also equally complimented by the Royal Academy of Medicine.

Of Dr. Harlan's qualifications as a translator, thoroughly informed on the subject of his author, no one can doubt,—engaged, as he has long been, in making preparations on human and comparative anatomy; and by his recent residence in Paris, having had ample opportunities for witnessing the results of Gannal's processes, and of various analogous improvements. We agree with Dr. Harlan, that the volume before us embraces subjects of interest to both the general and the professional reader, and that it contains "indispensable material for the researches of the practical anatomist and student of natural history."

Stokes's Lectures on the Theory and Practice of Physic, by Bell.[2]

It is scarcely necessary for us to repeat what we have already said touching the value of Stokes's Lectures. The first edition appeared in the pages of this Library, and the only collected copy of his writings prior to the present existed in that form; for whether it is that the lectures are not as highly prized in Great Britain as they are here, or that some other cause may be in action with which we are unacquainted, they have only appeared there in the pages of a periodical.

Dr. Bell has added to Dr. Stokes's lectures certain dissertations to which he has given the same term, and endeavoured to accommodate the language as if they had been addressed to a class of students.

Of the twelve lectures added, one is on the characters of typhus and typhoid fever; no less than seven are on congestive fever; and the rest discuss cholera in its various forms, the exanthemata, rheumatism, and chronic laryngitis.

To render Dr. Stokes's work more extensively useful, we should have adopted a different course from that pursued by Dr. Bell. As far as the work went, it was valuable in many respects. It was not only instructive, but attractive; yet it was confessedly, as a guide to the student, imperfect. This imperfection would, in our mind, have been better supplied by dividing the chapters or "lectures" on congestive fever amongst subjects any one of which would have been equally important. As it now is, the student may in vain look for information on some of the most interesting diseases; and even his reference to what the work really does contain is greatly impeded by the want of an index. In the first American edition the index was sufficiently brief, but still it was an aid; whilst every one who refers to the edition before us is compelled to wade through a long table of contents before he can find the reference he desires. Yet Dr. Bell has been industrious, the additional lectures occupying upwards of 170 pages of the volume, and containing—as every thing proceeding from him must contain—information of much interest to the profession.

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[1] History of Embalming, and of Preparations in Anatomy, Pathology, and Natural History; including an account of a New Process of Embalming. By J. N. Gannal. Paris, 1838. Translated from the French, with notes and additions, by R. Harlan, M. D. 8vo, pp. 264. Philadelphia, 1840.

[2] Lectures on the Theory and Practice of Physic. By William Stokes, M. D. &c. &c. 2d American edition, with numerous Notes and 12 additional Lectures. By John Bell, M. D., Lecturer on the Institutes of Medicine and Medical Jurisprudence, &c. &c. 8vo. pp. 672. Philadelphia, 1840.

MISCELLANEOUS NOTICES.

Paine's Medical and Physiological Commentaries—We are requested to state, that Dr. Paine will soon reply, in a pamphlet, to all the strictures of H. J. B. which have appeared in the Boston Medical and Surgical Journal, in relation to Dr. Paine's Essay on the Principal Writings of M. Louis, contained in his valuable "Commentaries."

Philadelphia School of Anatomy.—The annual announcement of this school of anatomy, under the superintendence of Drs. James M'Clintock, and J. M. Allen, contains the names of 135 students, who formed the class of 1839–40.

Philadelphia Hospital, Blockley—Dr. M'Clintock—The Board of Guardians have recently appointed Dr. M'Clintock as one of the obstetrical physicians to this institution, in the room of Dr. Charles Bell Gibson, resigned. Dr. Gibson will, in future, practise his profession in Baltimore, where we trust he may meet with eminent success.

On the structure of the Macula Lutea (Foramen of Soemmering) of the Human Body. By Dr. Grube, of Konigsberg.[1]—The author had previously made many observations on the structure of this part, but their results had been unsatisfactory, in consequence of the length of time that had elapsed after death before the eye was removed. The examination here described is that of an eye taken from a body a few hours after an accidental rupture of the spleen.

The retina adhered so firmly to the vitreous humour that the greater part of the latter could be removed only by carefully cutting with scissors. With the naked eye it was at once easily discerned that the level of the macula lutea was not a little raised above the surface of the retina. On placing it and the part around it under a microscope magnifying 300 times, and compressing it but slightly, the maculata lutea presented exactly the appearance of shagreen. Longish-round corpuscles, which were smaller the nearer they were to the centre, and there not more than one fourth or one fifth of the size of the medullary corpuscles on the surface of the rest of the retina, were arranged close together and with great regularity, like rays passing from the centre to the circumference of the spot. Towards the circumference they became larger, and gradually merged into the form and size of the corpuscles of the rest of the retina. The circumference, however, did not form a regular circle, but the small medullary bodies radiated beyond it at some parts, to different distances from its outline.

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[1] Muller's Archiv. Heft. i. 1840; and Br. and For. Med. Rev. July, 1840, p. 255.

New method for the radical cure of Varix, and especially of Varicocele. By M. Ricord.[1]—After pointing out the errors of believing that varicocele affects only persons of twenty or thirty years old, and imagining it to be a common consequence of gonorrhœa or epididymitis, whereas in fact it is more generally a predisposing cause of the latter disease, and instead of being produced by it, is more often cured by it; M. Ricord proceeds to describe his mode of operation.

"The hair must be shaved from the genital organs on the side to be operated on, and the veins must be dilated by making the patient walk about a little, or by enveloping the scrotum for a few hours in hot poultices, or by fomentations. This being done (though if the swelling is at all times considerable these precautions are unnecessary), the vas deferens must be separated from the mass of veins, and the latter being taken up with a fold of the scrotum, a flat lance-shaped needle armed with a double-looped thread must be passed beneath them. When the needle has been passed completely through the skin from one side to the other, the veins are to be let go, the skin alone being now held up, and then a second needle similarly armed must be passed through over the veins, entering at the same hole by which the first needle was thrust out, and passing out at the same hole by which the first entered. The bundle of veins is thus fixed between two double threads, of which one passes over and the other beneath it. The ends of each double thread on each side are then to be passed into the loop of the other, and now, by drawing these ends in opposite directions, the vessels are tied beneath the skin. By this kind of ligatures the vessels may either be suddenly constricted or be tied gradually in a manner something like that adopted by M. Breschet, or most conveniently by a properly adopted *serre-nœud* after the fashion of a tourniquet.

"It is usually from the tenth to the twentieth day that the vessels are divided by this means, and their division may be easily recognised by the freedom with which the ligatures may be drawn from one side to the other without being, as they were before, retained by the parts which they inclosed. It sometimes happens, that at the instant of the first constriction the patient suddenly feels rather an acute pain in the course of the spermatic cord; it is usually less severe than in the other operations for the same purpose; and though it often recurs at the successive constrictions, yet it has never been long continued, nor given rise to any accident. It is sufficient to keep the scrotum raised, to employ some anodyne frictions on the inguinal canal or the lumbar region, or to apply some emollient poultices, to effect its removal. Sometimes a slight œdema of the scrotum supervenes, and I have twice observed rather a considerable serous effusion in the tunica vaginalis. In one patient, also, who went out of the hospital and in a few days after the operation exposed himself to great fatigue, a slight abscess formed in the cellular tissue; but with these exceptions, there has been no important accident.

"It must be clearly understood, that if the patient is strong and plethoric, he is to be bled from the arm directly after the operation; that the horizontal position must be maintained till the vessels are cut through; and that the bowels must be carefully kept open.

"Twelve patients have now been operated on in this manner at the Venereal Hospital, and in all the most complete and satisfactory result has been obtained. The three last of them were presented at the Academy of Medicine; two completely cured, and the third, who was operated on only two days previously, still wearing the ligature and the *serre-nœud.*

"I have employed the same method for varices of the legs. I have already operated on nine patients, some having simple varicose swellings, and others varicose ulcers. In some a single ligature was sufficient, in others as many as four were applied. In none have there occurred any symptoms of phlebitis; the varicose veins have been obliterated and the ulcers speedily cicatrised; and in one of the patients whom I saw six months after the operation, there was no relapse. Still, however, I do not think that this method is likely to be so successful in all cases of varices of the lower extremities as in those of varicocele."

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[1] Bulletin Générale de Thérapeutique, Mars, 1840; and Br. and For. Med. Rev. July, 1840, p. 271.

Revaccination in the Prussian Army in 1839. *By Dr. Lohmeyer.*[1]

Total revaccinated		41,481
Of this number there were *distinct* marks of previous vaccination in	33,225	
indistinct in	5,889	
none in	2,367	
The course of the disease was regular in		19,249
irregular in		8,534
And no effect followed in		13,698
Out of the number that remained unaffected in the first instance, the operation was repeated with effect in	2,105	
without effect in	7,886	

Out of the number revaccinated, in whom the disease ran a regular course (19,249), there were produced perfect pustules as follows:

1 to 5 pustules in	8,762
6 to 10	5,650
11 to 20	4,095
21 to 30	742

Of those revaccinated with effect in 1839 and previously, there were attacked in the course of the same year,

With varicella	18
With varioloid disease	7
With smallpox	0

The revaccinations, as in former years, were made partly from arm to arm, and partly (in the beginning of the process) from dried lymph. In the operations from arm to arm, the lymph was taken partly from fresh-vaccinated children, partly from adults vaccinated or revaccinated. The results, as in former years, were so far similar in the two latter cases, that true pustules equally followed from either source; but it appeared from the testimony of several of the surgeons that there ensued a more powerful reaction, with considerable fever in the stage of maturation, from the insertion of the lymph from adults than from children. The inoculations from dried lymph often failed.

As had also been formerly observed, the disease was often remarkably well characterised in individuals in whom the scars of previous vaccination were strongly marked, while it often failed, and after repeated trials, in others who showed no trace of a former disease.

By way of experiment, many individuals, in whom there existed more or less distinct scars from *smallpox*, were vaccinated, and frequently in these there ensued perfectly good pustules both as to appearance and course.

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[1] Berl. Medic. Zeitung, April 22, 1840; and Br. and For. Med. Rev., July, 1840, p. 276.

THE

AMERICAN MEDICAL INTELLIGENCER.

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For the American Medical Intelligencer.

Art. I.—TREATMENT OF SNAKE-BITE.

BY W. BECK DIVER, M. D.

[The following communication was recently received from the zealous author, who left his country as a missionary, to bestow his valuable services on the benighted inhabitants of oriental regions. We hope his health may permit him to live long in his useful and benevolent career; and that we may receive from him—from time to time—the fruits of his observation and reflection.

We have likewise from him a History of Vaccination in China, which shall appear in our next number.—Ed.]

Macao, May, 1840.

To the Editor of the American Medical Library and Intelligencer.

My Dear Sir,

The following history of the "Treatment of Snake-Bite by the Native Practitioners of Bengal," was originally printed in a Bengali paper, called Bháskar, or The Sun, and subsequently translated and published in the 91st number of the Calcutta Christian Observer for December last. It treats upon a subject of much importance in itself, and makes us acquainted with some native alexipharmics, as well as with the views and practice of the Baidyas, or medical men of Bengal, in regard to the action and counteraction of serpentine poison. It is for *practical* men to decide how far the Esculapius of Bengal is either rational in his theory or judicious in his treatment of his patients.

It will doubtless interest your readers as well as serve the cause of humanity and science.

Most respectfully yours,

W. Beck Diver.

Treatment of Snake-Bite by the Native Practitioners of Bengal.

"There are many varieties of snakes or serpents;—among these the four following abound in this province, viz. the Gokhura, or cow-hoofed snake, a species of Cobra di Capello, so called from a real or fancied resemblance in the spectacle to the prints of a cow's hoof; the Keútiyá, or black serpent, the black Cobra di Capello (Coluber Naja or Nága); the Kánor, or arrow-snake, a species of serpent which, attaching itself to trees, darts thence like a *bolt* upon its prey; and the Borá, or large boa constrictor. The bites of all these are fatal to life.

"The poison of the three first, viz. the Gokhura, the Keûtiyá, and the Kánor, is excessively virulent and rapid in its operation. When a person has been bitten by any of these, the virulence of the venom, so to speak, instantly affects the sight,—the patient's eyes inflame, and presently he swoons away. Still the poison does not spread itself beyond the wounded part for the space of half an hour; after about that lapse of time it begins to make its way into the blood-vessels. For half an hour, therefore, following the bite, there is no danger to life; within that period, however, an iron, heated red hot, must be applied to the wounded part.[1] If this cannot readily be done, then let a bandage, drawn very tight, be applied a little above the part; then as the poison begins to ascend the vessels, the surface over them will swell or puff up successively in spots, as if a small pea or similar nodule were passing on. The moment of swelling must be very carefully watched, because the subsequent subsidence is instantaneous. Keeping, then, the eye steadily fixed upon the passage within of the poisonous *goutte*, let an incision be made with a sharp instrument at the distance of three fingers' breadth above the rising or gibbosity it occasions, so as to sever the vessel, when the poison will spurt out at the opening and fall to the ground. If, however, the operator be unable from inexperience to detect this,—to a common eye, not very perceptible symptom, another easy course in that case is as follows. As the poison cannot readily pass beyond the place of ligature, it there causes a fulness like the gradual swelling or inflation of a leech in sucking, seeming to strike against the bandage, or against a barrier to its passage, and then receding from the shock. This appearance is easily discernible. Now, if an incision be made just at the point of retrocession, the venom will instantly flow out with force through the opening made. Then loosening the bandage, let some salt be applied to the wound. The patient will suffer no further inconvenience.

"The mode of treating the bite of the Borá (or Boa constrictor) is different, except in so far as regards the application of a red hot iron to the wounded part; this is the first process in any case. The reason for this difference is, that the poison of the Borá does not flow readily; two hours only after it has been introduced it begins to gather into globules or drops, to penetrate the muscles and pass into the system. If, however, it have passed beyond the wounded spot, then let the part directly above the wound be divided with the knife, to ascertain how far it has passed. For no blood will flow where the venom has reached, nor is the patient sensible to pain from any incision made there. Where, however, blood flows upon incision, let the hot iron be applied all round the limb, leaving an armlet, as it were, of cauterised muscle; whereupon the venom will discharge itself through the opening, mingled with serous blood. This is the only *certain mode* of cure for the bite of the Borá,—failing which the patient runs the extremest risk of his life.

"Where, however, the above process has not been adopted, there is one mode of treatment which is applicable in all cases of snake-bite. It is this. As soon as the patient is seen to totter and fall, let a strong fire be immediately kindled close to his head. Then let a couple of earthen pots (or cooking pans) be brought and laid empty upon the fire. When these are thoroughly red, let one of them be taken up with a pair of tongs and held very carefully, mouth downwards, over the patient's head, so as, while it does not touch the head in any wise, yet to enclose it partially within its cavity. When one vessel cools, let the other be similarly applied. This course must be persevered in for at least two full hours, whereby a profuse perspiration will be excited over the patient's whole body, with which the poison will escape in a watery state. The patient will soon begin to open his eyes, and after a while will find himself quite recovered. Those who practise the cure of snake-bite term this mode of treating it Brahmajál (or *Brahma's magic power*), from the effect produced. It is effectual, however, only if applied while the poison remains confined to the head,—for if it once enter the abdomen, Dhanwantari (physician to the gods) himself must give up his case as utterly hopeless.

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[1] The actual cautery here prescribed is a favourite remedy in native practice on many occasions, as in treatment of disease of the spleen, &c. &c.—W. B. D.

"The people of this country believe that poison may be counteracted by charms; and as some cases have occurred in which persons bitten by snakes have recovered for whose cure charms had been employed, they have been confirmed in their belief. In our opinion, however, this is a groundless persuasion: our reason for which we freely give. The bites of snakes are of two kinds; one in which the tooth or fang has only scratched the surface—this is attended with no risk of life, because the reptile's venom being open to the influence of the outer air of the atmosphere, is prevented by it from spreading: the air mixing with or passing through the poison, diminishes its virulence and neutralises its noxious quality.[1] Hence it is that snake charmers in such cases, after reciting their incantations, conclude by striking two or three smart taps upon the wounded limb, when the patient, fully confiding in the efficacy of the process, instantly sits up quite recovered! The by-standers, too, and others, all believe the cure to have been effected by the charm.

"In the second case of snake-bite, however, that is, where the fangs of the creature have struck deeper and penetrated the muscle, charms are of no avail: when the enchanter (to cover his inability) declares that Time has stung his patient! The simple truth, however, is, that in these cases the venom has not been reached by the outer air; whence, in spite of incantations, however oft repeated, it spreads through the system, and the man expires!

"The teeth of the serpent are not universally furnished with poison. Just beneath the eyes of this class of reptiles are two elongated fangs, resembling the beard or very fine feelers of some small fishes. These are tubular, and would admit the passage of a hair. Through these tubes the poison flows. The poison of a serpent resembles honey in appearance and degree of consistence. Take a snake and place a metal vessel before it—if it dart its fangs thereat, its poison will flow into the vessel; a drop of blood placed in contact with the poison will not mix with it. Nor will swallowing it be attended with any danger to life: it will only cause a redness of the eyes and relaxation of the system, similar to what are produced by drinking of any intoxicating liquor. A little lime juice, however, is an effectual cure for these effects. Indeed lime juice is a specific generally in cases of snake-bite. It sometimes happens that the eating of fruit which has been previously bitten by a serpent is followed with loss of life; yet a dose of half a poyá (weight) about 7 ounces avoirdupoise, of lime juice, would have prevented the fatality; for want of a knowledge of the remedy a man dies!

"We have, in the above, treated the subject but slightly, yet are fearful our readers may think we have written too much already. We will therefore only add, in conclusion, that we had tested our prescriptions by previous experimental practising upon goats, &c., and that subsequently many individuals who had been bitten by snakes, in following the same course have been cured."

To Professor Dunglison, Philadelphia.

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[1] From this opinion (which I think is not supported by fact) I beg leave to differ. It is not clear that the abrasion of the cuticle by the fangs of the snake is unattended by risk, nor that the exposure to the atmosphere neutralises the poison, because the vaccine virus is introduced into the system by a mere scratch with the point of a lancet, and if there were any counteracting powers in the atmosphere, they would certainly be effectual in this case.—W. B. D.

ART. II.—ANATOMICO-PATHOLOGICAL RESEARCHES ON CIRRHOSIS OF THE LIVER.

BY ALFRED BECQUEREL, PARIS.[1]

The name cirrhosis was given by Laennec to a peculiar affection of the liver, in which that organ appears as if filled with numerous yellow granules, which are sometimes present in such numbers that the surface of a section of the liver presents an uniform yellow colour. If this surface is carefully examined, M. Becquerel says an innumerable quantity of minute granulations may be discovered, which may be compared to the lobules of hardened and reddish-coloured fat which are commonly found in the subcutaneous cellular tissue of the thigh and leg of anasarcous subjects. These little masses are sometimes intimately united to the texture of the liver, but they are frequently separated from it by a thin layer of cellular tissue, which forms a slight envelope round the globules, from which they are easily detached.

The exact nature, the causes, and the symptoms of this affection, are very imperfectly understood; and it is for the purpose of elucidating these points that M. Becquerel has published the present memoir. Laennec considered that in this disease a new morbid product was deposited in the liver, which he termed "cirrhose," and which he believed might be also developed in other organs of the body; appearing first in a state of crudity and afterwards softening. Andral states that the granules, in his opinion, merely arise from hypertrophy of the white or secreting part of the liver, which in the more advanced stages is accompanied with corresponding atrophy of the red or vascular tissue, giving rise to that shriveled state of the liver generally, which was described by Laennec as frequently occurring in this disease. M. Cruveilhier considers that cirrhosis consists in atrophy of a great number of the lobules of the liver, and a corresponding degree of hypertrophy of those which remain, which causes the irregular granulated surface. Dr. Carswell, who gives an admirable description and delineation of this disease in the article atrophy, in his work on Pathological Anatomy, regards it as consisting in atrophy of the lobular structure of the liver, produced by the pressure of a contractile fibrous tissue formed in the capsule of Glisson; an opinion which, as we shall find, very nearly coincides with that adopted by the author of the present paper. M. Bouillaud regards cirrhosis as a disunion of the two natural elements of the liver, the yellow granulations being nothing more than the secreting lobules undergoing disorganisation in consequence of obliteration of the vascular tissue, and consequent obstruction of the hepatic circulation.

M. Becquerel, previously to stating his own opinions on the nature of the morbid alteration of the liver in cirrhosis, briefly reviews the different opinions concerning the intimate anatomical structure of this organ in its natural state; and he adheres to the notion that there are two distinct substances: one yellow, which is the true secreting tissue; and the other red, which consists of the ramifications of veins and arteries. He inclines to the opinion of Cruveilhier, that each lobule possesses a spongy tissue not injectible; and thus widely differs from Mr. Kiernan, who describes the liver as being throughout essentially vascular; the lobule consisting of minute radicles of the biliary ducts, surrounded by a plexus of the terminating branches of the portal veins. The latter eminent pathologist explains the differences in appearance between the red and yellow darts of the liver by the different degrees of injection of the different portions of its tissue.

Admitting, then, the presence in the liver of secreting lobules, into the interior of which no vessels enter, not even the minute ramifications of the biliary ducts, which, together with the branches of the vena porta and hepatic artery, form a network round the lobules without penetrating them; the lobules themselves merely consisting of a mass of albuminous corpuscules, as described by MM. Dujardin and Verger; M. Becquerel next endeavours to ascertain which of the tissues—the secreting or the vascular—is the one altered in cirrhosis, and he arrives at the conclusion that it is the latter only. He says that this tissue becomes infiltrated with a yellowish plastic or fibro-albuminous matter, which possesses the properties which characterise fibrine and albumen; for it is coagulated by heat, and by a continued application of that agent, is converted into a horny substance. He considers that this effused matter is analogous in its composition to the false membranes which are developed in mucous, and more frequently serous, tissues; and he says that it undergoes the same changes.

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[1] **Archives Générales de Médecine, Avril et Mai, 1840; and Br. and For. Med. Rev. Oct. 1840, p. 560.**

M. Becquerel has determined that in this disease of the liver no pus globules can ever be detected in the altered structure; a very small quantity of fatty matter is likewise present, which is always abundant where pus is met with. He deduces from these facts that cirrhosis does not arise from acute inflammation; the absence of fat will also distinguish this disease from the fatty disease of the liver,[1] in which this organ is likewise of a yellow colour.

This fibro-albuminous matter is supposed to be deposited by interstitial infiltration in the central part of the secreting lobules, and the yellow substance of the liver becomes thus hypertrophied, and causes compression and eventually atrophy of a great part of the red or inter-lobular substance. Many of the vessels and ducts are thus obliterated, and the tissue of the liver becomes difficult of injection. In the most advanced stages of this disease, the effused matter loses great part of the water which entered into its composition, becomes firmer, and contracts in size. It thus undergoes the same changes as false membranes, which are at first soft and thick like white of egg, but which afterwards become organised and firm, and lessen in volume. From the contraction of this matter, the yellow substance of the liver which was at first hypertrophied becomes atrophied, the altered lobules are diminished in volume, and many of them often coalesce, forming the patches which were described by Laennec as occurring in certain forms of this disease, and which give an irregular appearance to the surface or to a section of the liver. When this retraction has taken place, a great portion of the red or interlobular tissue of the liver no longer exists, and we only see an irregular agglomeration of yellow tubercles of different sizes, and the whole organ becomes hardened and shriveled.

The immediate causes of this disease are completely unknown. M. Becquerel conjectures that it may arise from active and long-continued congestion of the liver, consequent upon chronic disease of the lungs or heart (with the affections of which organs cirrhosis is often complicated), or arising from other causes.

Cirrhosis never affects the liver partially, it always attacks all parts of its substance simultaneously. The gall-bladder is almost always quite natural. M. Becquerel has not made any comparative analysis of the state of the bile in this disease, but he found it vary considerably in consistence and colour.

This affection of the liver is mostly complicated with organic disease of other parts, as Bright's disease of the kidney, and various lesions of the heart and lungs; it is rarely met with by itself: M. Becquerel only found seven out of forty-two cases which he could consider as uncomplicated. He classes these complicating diseases under two heads: *First*, Chronic diseases, developed before or at the same time as the cirrhosis. *Second*, Diseases more or less acute, and probably consequences of the cirrhosis. 1. To the first class belong the following:—Lesions of the *Heart*. These are more commonly met with in connection with cirrhosis than any other; for in forty-two subjects examined, the heart was affected with chronic disease in twenty-one cases, or in half; and the disease in all these instances had advanced to such a degree that it must have preceded, if it did not give rise to, the disease of the liver. The disease of the heart in these cases is often complicated with other affections, as emphysema of the lungs and chronic bronchitis, tubercular disease, or Bright's kidney.

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[1] See Brit. and For. Med Rev. vol. vii. p. 554.

It is exceedingly difficult to determine whether the affection of the heart gives rise to that of the liver, and if so, in what manner. M. Becquerel has no doubt that the former precedes the latter in almost all cases, and supposes that it may give rise to it by keeping up a state of continued congestion of the liver. Pulmonary emphysema and chronic bronchitis, which are sometimes found accompanying cirrhosis without disease of the heart, may be supposed to act in its production in the same manner, by obstructing the venous circulation. Cirrhosis is very rarely found in connection with tubercular disease of the lungs. The fatty degeneration of the liver, on the contrary, is a frequent complication of consumption.

The morbid alteration of the *kidney*, known by the name of Bright's disease, frequently accompanies cirrhosis, having been met with fifteen times in forty-two cases. Some differences were observed between these cases of considerable interest; thus in nine cases where cirrhosis and renal disease existed together, and appeared to be of the same standing, old organic lesions of the heart and lungs were also found, which our author considers to have been the exciting causes of the diseases of both the liver and kidneys, repeated congestion of both these organs having been occasioned by obstruction to the circulation. In another series of cases, which includes three out of fifteen, the cirrhosis seemed to be of a much older date than the affection of the kidneys, and probably gave rise to it by obstructing the circulation of the abdominal veins. In the remaining three cases, the disease of the liver and kidneys seemed to be of about the same date, and had been probably developed from a similar cause, the nature of which, however, was unknown.

2. In the second class may be arranged the following:—*Ascites*, which constantly accompanies cirrhosis in the more advanced stages; *Peritonitis*, producing purulent effusion and the formation of false membranes; *Pleuritis* and *hydrothorax; Pericarditis*—this has only been met with in a few cases; *Anasarca*—this generally occurs in complicated cases along with ascites, and when the disease of the liver is in an advanced stage. Besides these, *œdema of the lungs*, *pneumonia*, and *pulmonary apoplexy*, have been met with, as well as congestion of the mucous membrane of the alimentary canal; and *intestinal hemorrhage*, which must be considered as an effect of the disease of the liver, arising from the obstruction of the circulation of the blood through the vena porta.

Cirrhosis is more frequently met with in men than in women: thus of eighteen cases of the simple or uncomplicated form of this disease, twelve occurred in males and six in females. Of the whole number of forty-five cases examined by M. Becquerel, twenty-eight were found in men, and seventeen in women.

With regard to the influence exerted by age, the eighteen simple cases may be thus arranged:

Between	18	and	20	years,	1
,,	20	,,	30	,,	2
,,	30	,,	40	,,	7
,,	40	,,	50	,,	3
,,	50	,,	60	,,	5

Thus persons between thirty and forty seem to be most liable to be attacked by cirrhosis. This disease is also met with in children; and M. Becquerel is disposed to think that it occurs more frequently in young subjects than has generally been supposed.

With regard to the symptoms produced by cirrhosis, none exist sufficiently characteristic to enable the physician to diagnosticate its presence during life. The most constant symptom of this disease in its more advanced stages is dropsy, which always commences in simple cases in the abdomen; its approach is generally unaccompanied by pain, but in a few cases the belly is the seat of pain, either with or without pressure, and the presence of peritonitis is thus indicated. Anasarca sometimes precedes the ascites, but Bright's disease of the kidney or disease of the heart are then always indicated. M. Becquerel says that the state of the urine is always peculiar in this disease; it is of a deep orange and often reddish-yellow colour, very dense, strongly acid, and deposits an unnaturally large precipitate of urate of ammonia, which is of a bright red or cinnabar colour. The causes of this state of the urine are unknown.

The course of this affection is uniform and continued, and it always proceeds more or less quickly to a fatal termination, being apparently uninfluenced by any plan of treatment.

BIBLIOGRAPHICAL NOTICES.

Churchill on the Diseases of the Pregnant and Childbed State.[1]

The "Outlines of the Principal Diseases of Females" was published in the second year of the "Library," and was received with considerable favour. The work before us, which is begun in the present number of the "Library," is entitled to equal attention. The reviewer in the Edinburgh Medical and Surgical Journal thus expresses himself: "Dr. Churchill's present volume is very ably executed, and we have no doubt will soon become a favourite work with the student, and a standard work of reference for the accoucheur and general practitioner. It is the only sytematic treatise on the diseases of pregnancy and the puerperal state that has appeared in England since the publication of the work of Dr. White, of Manchester, on the same subjects, in 1772."

Professor Aiken's Introductory Lecture.[2]

This Introductory Lecture is devoted to the history of the rise and progress of electricity,—a subject appropriate to Dr. Aiken's course in the University of Maryland. It is treated in a manner creditable to him, and one which cannot fail to be useful to his hearers.

MISCELLANEOUS NOTICES.

Pennsylvania Hospital for the Insane at Blockley.—The managers of this hospital have recently appointed Dr. T. S. Kirkbride, of this city, medical superintendent of the noble asylum for the insane, which they have erected at Blockley. Dr. Kirkbride, we can say from personal knowledge, possesses qualifications which adapt him eminently for the situation, and we look forward with pleasing anticipations to the published results of his observation in a position which offers so many opportunities for the exercise of his professional acquirements.

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[1] Observations on the Diseases incident to Pregnancy and Childbed. By Fleetwood Churchill, M. D., Licentiate of the King and Queen's College of Physicians, &c. &c. 8vo, Dublin, 1840.

[2] An Introductory Lecture delivered before the Medical Class of the University of Maryland, Sept. 1840. By William E. A. Aiken, M. D., Professor of Chemistry and Pharmacy. 8vo, pp. 32. Baltimore, 1840.

Mr. Malin, the worthy librarian of the Pennsylvania Hospital, was at the same time appointed steward of the asylum.

Effects of the Operation for Strabismus on Vision.[1]—Dr. Hays made an oral communication relative to the operation recently devised for squinting, and to its effects in modifying the adjusting power of the eye for near and distant objects.

Dr. Hays stated, that certain phenomena which he had observed in one of the cases in which he had divided the internal rectus muscle, for the cure of squinting, seemed to favour the theory of the adjustment being made by an alteration in the form of the eye, under the conjoint action of the four recti muscles; a theory rejected by the best physiologists of the day.

The case, the details of which Dr. Hays related, was that of a gentleman thirty-six years of age, who had squinted with his left eye since the age of five years. Both the eyes were presbyopic, the left, however, was most so, and required for distinct vision a glass three Nos. higher than the other eye; the respective Nos. being 11 and 14. Vision with the left eye, even by the aid of a glass, was not perfect, words printed in long primer being scarcely legible. After the division of the internal rectus muscle, vision not only improved, but the eye became less presbyopic, and at the present time, three weeks since the operation, said Dr. Hays, the glass (No. 14) which had been before adapted to the patient's left eye, now magnifies so much, that it is unpleasant to read with it; and he is able to see best with glass No. 11. On careful comparison, he is unable to perceive any difference in the size of objects viewed with either eye through this glass; and an opera glass, adjusted to one eye, seems equally well adapted for the other. These facts, Dr. Hays remarked, show, that a change has taken place in the left eye, and this probably consists in an elongation of its antero-posterior diameter, resulting from the operation.

Dr. Hays also made some observations on the mode in which squinting causes an impairment of the function of vision, and stated, that from a great number of cases which he had examined, it appeared to him to be a general rule, that the greater the degree of strabismus, the more imperfect is the sight of the affected eye. In all the cases in which he had operated, the sight had been improved.

Dr. Dunglison stated, that he was not prepared to admit, from this single observation, that the accommodating power of the eye is owing to the pressure of the four recti muscles on the eye-ball; the division of any one of them not being likely, in his opinion, to rectify the results of compression, if it existed in the case in question. He was disposed to refer a greater agency to the contraction and dilatation of the pupil in facilitating distinct vision at different distance, and he alluded to an experiment made on one of his own eyes whilst a student of medicine. This consisted in applying some freshly prepared extract of belladonna to the eyelids. The consequence was, that the pupil soon became so much dilated, that the iris was almost invisible. The focus of this eye was found to be at twice the distance of that of the sound organ; but in proportion as the effects of the belladonna passed off, and the pupil approached its natural size, vision became more and more distinct, and the focus nearer the natural. In the open air, all objects, except those near, were distinctly seen, but on entering a room, every thing was obscured.

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[1] Proceedings of the American Philosoph. Society, No. 13, for August, September, and October, 1840.

Dr. Dunglison expressed the belief, that squinting is often owing to impairment of vision in one eye, in consequence to a want of correspondence in the sensibility of the two retinæ; the mind, therefore, acquires the habit of attending to the impression made on the sound eye only, and the other, being neglected, is drawn into a position to interfere as little as possible with the better vision of its fellow.

Professor Bache alluded to a case of strabismus, which seemed to him to favour a suggestion thrown out by Dr. Hays, that defective vision in the inverted or everted eye might be owing to stretching of the optic nerve. In this case the eye became everted; and simultaneously, vision with it was impaired. Ultimately, indeed, the sight of both eyes was lost.

Case of Precocious Puberty. By Thomas B. Peacock, Esq.[1]—Jane Jones was an unusually large child at birth, and grew rapidly; and some time before she attained the age of three years, her breasts were observed to be unusually large. When she was about five years old they underwent a still greater development; the pudendum acquired greater fulness, and the catamenia made their appearance, since which time they have continued to recur regularly. The mons and labia, though without hair, were much more tumid than is natural in a child of her age.

She is now seven years of age; her form is that of a full-grown woman, being broad across the chest, breast, and pelvis; and her limbs are full and rounded. Her face, more particularly the lower part, is large, and her look heavy and childish. She measures 4 feet 3¼ inches, and 29 inches round the chest; her weight is 72 pounds avoirdupois. Her teeth are all of the temporary set, with the exception of the first permanent molar, and the two central incisors of the lower jaw. Her breasts exceed the usual size of these organs in unmarried adults, the gland is large and firm, and they possess the erected nipple, and in some degree the dark areola, of the pregnant state. The mons is very prominent, and presents a considerable growth of hair. Her mother states that the catamenia appear at regular intervals of a month, continuing profusely for two days, and partially during two others, and that the secretion cannot be distinguished either in quality or amount from that of other females. At the catamenial periods, the eyelids acquire a dark hue, and she experiences the ordinary attendant lumbar pains; indeed, she exhibits the usual signs of one in whom this function has become naturally established, and her general appearance is fully that of a girl of thirteen years of age. The mental faculties are not more highly developed than in children of the same age; and in her amusements she is as childish as those of her companions. She, however, displays a degree of modesty in her conduct towards males unusual in children of her age.

Absence of the Mammary Gland in a Woman. By Dr. Froriep.[2]—This remarkable case occurred in a well-formed woman, of about 30 years of age, who gave birth to a healthy infant in the month of December, but died herself of an attack of peritonitis eight days afterwards.

On dissection, it was found that the mammary gland of the left side was well developed, and full of milk; that of the right side was entirely wanting. The skin in this region was smooth, soft, and did not adhere to the subjacent parts; no traces of a nipple were apparent, and, in spite of a minute dissection, not a single granulation could be found which indicated the least rudiment of a gland.

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[1] London Medical Gazette, Jan. 3, 1840; and Edinb. Med. and Surg. Journal, April, 1840. p. 520.

[2] Froriep's Notizen, x. 1839; and Edinb. Med. and Surg. Jour. April, 1840, p. 522.

Other anomalies not less remarkable existed on the same side. The third and fourth ribs, in place of ending at the sternum, terminated in a line with the anterior margin of the scapula; these two ribs had their place supplied on the anterior part of the chest by a tendinous structure of sufficient resistance to hinder the lung from being pushed forwards in the form of a hernia. The cartilages of these ribs, however, were found attached to the corresponding part of the sternum, but they were connected together, and also with those of the fifth and sixth ribs. The sternal portion of the greater pectoral muscle, and the whole of the lesser pectoral muscle, were awanting, as well as their tendinous attachments, not the least trace of which could be detected. The *latissimus dorsi* wanted its two digitations, which are usually attached to the third and fourth ribs. It is unnecessary to say that the intercostal muscles proper to these ribs were awanting. Dr. Froriep explains these remarkable appearances by supposing that the developement of the parts had been arrested during the fœtal life by the pressure of the arm upon the corresponding portion of the thorax.

Spontaneous Rupture of the Spleen. By Dr. Næckel.[1]—A young man, of about 25 years of age, had an attack of diarrhœa, which was not relieved by opium or saturnine preparations. After five days' continuance, the abdominal pains became so severe, that he was forced to confine himself to bed. Next day he was seized with a sensation of sinking, cold sweats, &c. and died in a few hours. On inspection of his body forty-eight hours after death, a large quantity of blood was found effused into the cavity of the abdomen and pelvis, which had proceeded from an angular rent of the spleen of about four lines in extent, situate at the inferior margin of its anterior or external surface. The spleen was about five inches long by four broad; of a livid colour, and with its tissue much softened.

On Pain in the Back in Intermittent Fever. By Dr. Grossheim.[2]—This paper contains the results of observations made in fifty cases of intermittent fever, for the purpose of testing the opinions of Dr. Kremer (noticed in our fifteenth number, vol. viii. p. 67), who had stated that a painful sensation is a constant and pathognomic sign of intermittent fever, on pressure over the first dorsal vertebra and the adjacent parts of the spine, and that there is a constant relation between the severity of this symptom and of the general disease. The following are the results which Dr. Grossheim has obtained, and which seem to confirm Dr. Kremer's statements, although they had been contradicted, as we formerly stated, by the experience of other observers: 1. Pain on pressure on some part of the spinal column is a constant symptom of intermittent fever, except in those cases in which the ligaments of the vertebræ have become by age or disease so rigid that they will not yield to pressure. 2. There is no definite locality to this pain; it may be situated in any part of the column, but is most frequent in the middle of the dorsal portion, especially in quotidian intermittents. 3. The extent of the pain also varies considerably; one or two vertebræ only may be tender; and the pain rarely occupies the space of more than five or six; it may also be situated at distant parts, with intervals in which none is excited by pressure. 4. The intensity of the pain is equally variable. Sometimes it was so severe that the slightest touch of one of the spinous processes produced severe suffering; but sometimes violent pressure was required to detect it. Among those vertebræ that excited pain when pressed, the middle one was commonly the most sensitive; and in those above and below it the tenderness gradually decreased. 5. The pain was more severe during the

[1] Medicinische Zeitung, May, 1839; and Edinb. Med. and Surg. Jour. April, 1840, p. 522.

[2] Medicinische Zeitung, June 3, 1840; and Br. and For. Med. Rev. Oct. 1840, p. 557.

paroxysms than in the intermissions. When the severity of the fever diminished, or the tendency to its returns grew less, the severity and the extent of the pain in the back also decreased; but the complete removal of the fever was not always accompanied by the entire loss of the pain, which often continued in a modified degree after the fever had ceased to return, and remained the longer the more severe it had previously been. 6. Complications of the intermittent fever did not appear to have any influence on the pain; it continued when the character of the fever was altered either for the better or for the worse, and it returned in cases of relapse.

From observing the constant existence of this symptom, the author was induced to try what would be the effect of remedies that would tend to correct the local excitement that seemed to exist. He relates very briefly five cases, in which eight or ten leeches were applied over the spine in the situation where pressure gave the most pain. In four of these no other remedy was required; the pain ceased in a few days, and there was no recurrence of the febrile paroxysm.

Congenital Dislocation of the Humerus reduced after Sixteen Years. By M. Gaillard, Surgeon to the Hotel Dieu, of Poitiers.[1]—The following is an abstract of a report to the Royal Academy of Medicine, drawn up by MM. Cannet and Bouvier. They consider the case as very curious, and without a parallel in the history of surgery.

Mademoiselle L. B. a few days after birth presented a deformity of the left superior extremity, with much pain during its movements. The elbow was thrown from the body, the forearm semiflexed, and the hand in a state of promation. During her infancy she could not bring the elbow near the trunk, nor raise her hand higher than the chin. The limb was often painful during her early years; but latterly the pain had only come on when the limb had been long fixed in one position. When M. Gaillard saw her in 1836, she was sixteen years of age. He found in the posterior part of the shoulder a projection formed by the head of the humerus, which was placed in the subspinous fossa of the scapula, above the middle part of the spine, which was curved by the pressure it had undergone. On moving the arm, the head of the bone was felt rolling under the fingers, and it appeared abraded from rubbing on an irregular surface. The hand could not be brought to a state of supination. The forearm could not be extended on account of the permanent contraction of the biceps. Elevation and rotation of the arm were impossible.

On the 5th of January, 1837, the patient was placed on a stool, a cushion was applied to the external border of the scapula, and maintained by two cords passing from its extremities and attached to two fixed rings. The arm directed horizontally inwards was then submitted to the action of a weight of sixteen pounds. The weight was suspended at the end of a cord which passed through a fixed pulley, and was attached to a bracelet fixed above the elbow. Time after time M. Gaillard increased the power of the traction, occasionally adding his efforts to the force exercised by the weights. The extension, prolonged from twenty to twenty-five minutes, was repeated on the 10th and 11th of January, each time bringing the head of the humerus nearer the glenoid cavity, and with no other inconvenience than a slight pain and swelling of the arm. On the 13th the head of the humerus was more moveable. Further traction was employed, the arm being always placed horizontally. The humerus yielded, glided over the scapula for the space of an inch and a half, and approached the glenoid cavity. M. Gaillard then seized the elbow, and by carrying it backwards and upwards, he directed the head of the humerus downwards and forwards, then lowering the limb, he felt the head pass under the acromial arch, and leap over a projection which appeared to belong to the articular cavity. The arm was now in contact with the trunk, it was sensibly lengthened, and all its movements could be executed with ease.

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[1] Bulletin de l'Académie Royale de Médecine, Juin 30, 1840; and Br. and For. Med. Rev. Oct. 1840, p. 566.

The dislocation, however, recurred again and again, and was as often reduced. The difficulty was to maintain the bone after reduction. This, however, was effected by careful bandaging. The patient suffered considerable pain at times, but was relieved by the application of leeches. From the first reduction to the entire cessation of pain, a period of more than two years elapsed; but the cure was then complete, the patient using the limb equally as well as the other.

New Operation for Prolapsus Ani. By M. Robert.[1]—Relaxation of the sphincter ani being the cause of this disease, all the remedies hitherto employed for its cure are inefficacious when it arrives at the last stage, as they can only act on the mucous membrane of the rectum. These reflections have induced M. Robert to shorten the sphincter in proportion to the amount of relaxation, so that the two cut surfaces of the muscle might unite and form a narrow ring to oppose to the descent of the mucous membrane. This operation was performed with success on a washerwoman, thirty-three years of age, in June, 1839, in the hospital of La Pitié. This woman in her third pregnancy had a prolapsus ani, which was only temporary, though it caused some pain. Her fourth pregnancy produced a prolapsus uteri, a permanent and considerable prolapsus ani, with relaxation of the abdominal walls. M. Robert excised a portion of the mucous membrane with some temporary relief; but the disease afterwards increased, the discharge of fæces became involuntary, and she suffered from pains in the loins and upper part of the thighs. When she entered the hospital, the sphincter was so much relaxed that four fingers could be easily introduced.

The patient having been prepared for the operation by progressive diminution in diet, and the use of opium in order to effect long-continued constipation, M. Robert proceeded to operate in the following manner: An incision was made on each side of the anus, each incision being commenced a few lines external to the orifice, and carried backwards towards the coccyx. The fold of integument between the incisions, together with the portion of sphincter it covered, were removed, and the muscle was thus shortened by half its length. The wound was united from one side to the other by three points of suture. On the sixth day after the operation the sutures were removed. Union was nearly complete, but a fistulous passage remained from the anus to the coccyx. On the fifteenth day the woman had not passed any fæces. On the next day, the want of defecation being felt, in order to prevent any straining, the bowels were relieved by the curette. On the forty-first day the patient, who before the operation could not retain her fæces, kept an injection during the whole day; there was no more prolapsus; the opening had become of the ordinary size; but the finger when introduced did not experience the energetic contraction of the sphincter which occurs in the normal state. With the exception of a slight protrusion of mucous membrane, the cure was complete in August.

On certain Abscesses occurring in different parts of the Body during the course of Diseases of the Urinary Organs. By M. Civiale.[2]—M. Civiale has observed that, sometimes during the progress of gonorrhœa, and other diseases of the urethra, also in affections of the prostate gland, and when there is strangury or dysuria, or foreign bodies in the bladder, certain parts of the body, particularly the extremities and the larger joints, are attacked with pain, which may be dull and diffused, or acute and circumscribed, which is at first generally supposed to be rheumatic, but which terminates in the formation of large abscesses, differing in some respect from common phlegmons. M. Civiale states that these cases have escaped the observation of authors, but says that since his attention has been directed to them, he has met with numerous examples. When these accidental pains first make their appearance, the patient complains of a peculiar "*empâtement*" (?) and numbness of the part, which come on before any swelling is apparent. These local symptoms are accompanied with lassitude, weakness, anxiety, and general constitutional disturbance, which does not correspond at all with the degree of pain, which in the early stages is generally slight and diffused. As the case advances the pain becomes more acute, there is complete loss of appetite and sleep, great prostration of strengh, the pulse being sometimes scarcely to be felt; rapid emaciation, dry tongue, troublesome cough, and lastly delirium. The disease often commences with a febrile paroxysm, which may return at regular intervals or be continued. Together with these symptoms the urine is often of a deep orange colour, and is excessively fetid, and when this state of the renal secretion is met with, the case is always very serious. Local redness and swelling of the painful part, with evidence of the formation of matter, frequently do not make their appearance till a late stage of the disease.

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[1] Gazette Médicale, Juin 20, 1840; and Br. and For. Med. Rev. Oct. 1840, p. 568.

[2] Bulletin Gén. de Thérapeutique, Avril, 1840; and Br. and For. Med. Rev., Oct. 1840, p. 574.

One peculiarity in this affection is a tendency in the local disease to shift its position, and it often appears in different places at the same time. The suppuration in distant organs is often accompanied also with the formation of an abscess in the scrotum, perineum, or neighbourhood of the urethra or bladder, which, however, form no communication with the urinary passages.

With regard to the causes of this disease, M. Civiale has not remarked any predisposing circumstances. All the cases occurred in adults. In four there was stricture of the urethra, during the treatment of which affection (in one case by cauterisation, and in the three others by dilatation,) the abscesses were developed. In a fifth case there was serious disease about the neck of the bladder, and in several others there was urinary calculus, which had been broken down by the operation of lithotrity. In all the cases there seemed to have been some considerable irritation or inflammation of the urethra, or neck of the bladder, which appeared to give rise to the distant affection.

The peculiar state of the system, accompanied by the formation of these abscesses, is attended with considerable danger, and M. Civiale lost the first two patients which he treated.

The treatment found most efficacious was scarification of the whole of the affected surface in the early stage (from which a reddish or yellow coloured serum is generally discharged for several days in considerable abundance,) and then the use of emollient poultices. This plan will sometimes cut short the disease, but if the inflammation has reached the deep-seated cellular tissue of the limb between the muscles, this texture becomes indurated, and a vast abscess soon forms; several large deep incisions must now be made completely through the affected parts, which will allow of the escape of the matter, and also unload the distended vessels. The surgeon must not always wait for the sense of fluctuation to be apparent before he makes his incisions, for great relief will be afforded by cutting through the inflamed and indurated tissues before pus has actually been secreted, and the progress of the disease may be thus arrested. M. Civiale does not make any remarks concerning the general or constitutional treatment of the patient, but we presume that this must be conducted on common principles.

Successful Case of Cæsarian Section, with Suture of the Uterus. By Dr. Godfroy, of Mayence.[1]—On the 27th of March, 1840, Dr. Godfroy was called by M. Renant to a poor woman who had been two days in labour.

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[1] Gazette Médicale, 11 Juillet, 1840; and Br. and For. Med. Rev Oct. 1840, p. 578.

The term of gestation was stated to have passed over by fifteen days. The patient was of small stature, of a slight and rickety constitution, with that malformation of the hips which gives the peculiar characteristic walk to women so affected. She was married to a man of similar constitution, and her age was forty-two. Dr. Godfroy having passed the entire hand into the vagina, discovered a portion of the cranium in the form of a wedge, the bones of which crossed each other at the sutures. The summit of the head was wedged between the sacro-vertebral angle (which was very prominent) and the pubis, this space not exceeding two inches. Delivery even with the assistance of the forceps being therefore impossible, and the woman beginning to give way under the excessive pains, it was necessary that something should be promptly undertaken. Three modes presented themselves: first, to perforate the cranium and remove the trunk piecemeal; secondly, to perform symphysootomy; and, lastly, the cæsarian section. From the peculiar circumstances of the case, the first of these methods seemed fraught with great danger, and the life of the infant being ascertained was another objection. It appeared, further, impossible to afford a sufficient opening to give play to the forceps by dividing the symphysis, and the cæsarian section was therefore attempted. The patient was placed upon a table furnished as a bed, with her head depressed, and her legs raised and everted. Every means being adopted, by emptying the bladder, &c., to render the skin lax and fix the uterus, the operator made a vertical incision from the umbilicus almost to the pubes. The integuments having been divided tissue by tissue, the peritoneum was opened cautiously, and lifted up while the incision was prolonged upwards and downwards. The folds being turned back, the uterus was carefully opened about the median line. The placenta was fixed to the anterior part of the uterus, and was readily recognised, seized, and withdrawn by the hand. The infant was very carefully removed by the feet, and the umbilical cord divided; the child uttered a cry and was saved. Its weight was about six pounds and a half. No vessel required tying. The uterus was held near the abdominal orifice and cleaned, and then being left to itself, contractions immediately came on, and all hemorrhage ceased. The wound in the uterus, however, did not readily unite, but left a considerable space between the edges. Some points of suture were therefore applied by means of common needles, armed with double waxed threads, and passed through the whole thickness of the wound. The reunion was perfect, and then the uterus was entirely abandoned. The abdominal orifice was closed in a similar manner through the whole thickness of the integuments, even including the peritoneum. The edges were perfectly united, except at the lower part, where a small orifice was left for any suppuration which might ensue. Charpie and a strong bandage being applied, the patient was placed in bed with her head and knees elevated.

Some slight fever arose, and the patient was twice bled. During the two succeeding days the usual sanguinolent evacuations issued from the vulva. The dressings were removed on the 1st of April, and were found scarcely soiled by suppuration. Fresh charpie, steeped in cream, was applied and left till the 6th, when the union appearing firm, the threads of the sutures were all divided, and the wound simply dressed till the 24th, when there existed no trace of suppuration. There was no fever, and the patient left her bed on that day, taking care to sustain the cicatrix with a bandage. The cure was perfect.

M. Desormeaux and others have strongly objected to the sutures of the uterus. Dr. Godfroy thinks their danger has been exaggerated. At all events, the rapidity of the cure in this case, without the occurrence of any accident, is very remarkable.

Case of Puerperal Fever, with Unusual Sloughing. By Dr. Löwenhardt, of Prenzlau.[1]—The patient was a woman thirty-four years old, previously healthy and strong, who was delivered with the forceps on the 12th of November. Her five previous labours had been natural, and nothing dangerous had occurred in them, except that after the last she had had severe peritonitis.

On the 15th of November all the symptoms of peritonitis, which appeared to be especially severe in the hypogastric region, came on after exposure to cold. On the 16th and 17th she was largely bled three times, and numerous leeches were applied; purgatives and calomel and opium were also administered, but no relief was afforded. Large mercurial inunctions were then added, but the mouth was not at all affected, and the symptoms grew daily worse. On the 21st, no benefit having yet resulted from the treatment, she took thirty drops of the oil of turpentine. It produced considerable pain and heat in passing urine, but on the next day there appeared to be a slight improvement in both the general and local symptoms.

On the morning of the 23d, however, though the general condition of the patient seemed to be improved, the author found a gangrenous spot as large as the palm of the hand three inches below the umbilicus, and on cutting into it to a depth of two inches, he discovered that not the slightest pain was produced. A part of the slough was removed, and pyrolignous acid, with a decoction of bark and aromatics, was ordered to be applied. Bark was also given internally with muriatic acid.

The sloughing, however, continued, and on the 27th it was found necessary to remove a portion of the abdominal walls as large as the whole hand. On the day after, an opening formed into the intestine on the left side, where the sloughing extended most deeply, and a large quantity of fecal matter was discharged through it.

The patient, who had previously appeared stronger than might have been expected, now became much depressed, and as the constant fecal discharge through the wound maintained a permanent irritation, it was determined to try to close the opening into the intestine. The operation undertaken for this purpose was however unsuccessful; the intestine was found to be perforated in at least three places, and no mode of remedying its condition could be imagined. The patient became gradually more and more weak; on the 7th of December a considerable hemorrhage from the uterus occurred, and she died a few hours after.

On examination there was found at the aperture where the sloughing had passed through the abdominal walls, an excessively thickened, inflamed, and partly gangrenous layer of peritoneum, and beneath this the immensely swollen omentum, to which about six inches of small intestine were adherent. In this portion of intestine, which was highly inflamed, there were three apertures, of which the largest was about two inches and a half long, and was directed towards the left ilium; a second opened to the right and upwards; and a third, of an inch in diameter, was situated at the lower part of the intestine. Their edges were uneven and swollen, but appeared cicatrising.

On the Etiology and Treatment of Congenital Luxations and Pseudo-Luxations of the Femur. By Dr. J. Guerin.[2]—I have established it as a fact, in my History of Deformities of the Osseous System, that the greater number of congenital articular contractions are the product of primitive muscular retraction. . . . . I conclude: 1. That congenital luxations of the hip-joint are, like club-foot, torticolis, and spinal deviations, the product of primitive muscular retraction, and that the kind of luxation depends upon the direction in which the retraction happens. 2. There exists an order of deformities of the hip-joint not hitherto indicated, and to which I apply the term *pseudo-luxations*, because they look like luxations, although the head of the bone remains in the cotyloid cavity. These vary as do the complete luxations, and from the same causes. 3. The essential treatment consists in a division of the retracted muscles. I have thrice performed this operation with success. The congenital luxations and pseudo-luxations of joints depend in the majority of cases on primitive muscular contraction, which takes place in three different modes: by shortening, by paralysis, and by stoppage of development of the retracted muscles; and the different varieties of these deformities are, like those of the neck, the spine, and the foot, the effect of this retraction differently distributed in the muscles of these parts. In a girl aged fourteen years, I divided the biceps, semi-tendinous, semi-membranous, and rectus internus, for two incomplete luxations of the knee, produced by primitive retraction of these muscles; on each side there was subluxation of the tibia backwards upon the condyles of the femur, rotation of the limb outwards through the space of about one fourth of a circle, and an inclination outwards of the leg upon the thigh of about sixty degrees. The rotation outwards, the lateral inclination and the gliding backwards of the tibiæ, were reduced on the day following the operation to the simple normal flexion of the leg upon the thigh, and since that period there remained nothing more than a certain degree of permanent flexion of the joint. In order to convince those who feel any doubt respecting the safety with which these operations may be performed, I may add that, on the same day, I successively divided in the young female above mentioned thirteen muscles or tendons beneath the skin, for the relief of certain deformities from which she suffered; on the following day she felt no kind of pain nor indisposition, nor was there any symptoms of inflammation in any one of the divided parts.

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[1] Casper's Wochenschrift, Mai 16, 1840; and Br. and For. Med. Rev. Oct. 1840, p. 579.

[2] Gazette Médicale de Paris, No. iv., 1840; and Br. and For. Med. Rev., Oct. 1840, p. 576.

On the Funic bellows-sound. By Dr. Dietrich.[1]—In addition to the placental murmur, and those accompanying the pulsations of the fœtal heart, there is a third sound occasionally to be heard in pregnant women, and one which is well ascertained to have its seat in the umbilical cord. It is a single murmur of the bellows species, and synchronous with the first sound of the fœtal heart. Dr. Dietrich is of opinion, herein agreeing with others who have examined this subject, that the sound depends on diminution of the calibre of the umbilical arteries, either through pressure or stretching of the funis, or both combined. He gives cases illustrating its production under these different conditions. In the first, wherein the bellows-murmur is presumed to have been the effect of pressure, the umbilical cord was of the unusual length of twenty-four inches and a half, twisted once round the neck and tightly knotted in its middle third; the knotted part having acquired from its tightness a white, shining, tendinous appearance. In two cases exemplifying the occurrence of the sound in consequence of a tense state of the cord, this was only ten and fourteen inches long, and this unusual shortness led to greater tension in the former instance from the presentation being a breech one; in neither case was the cord twisted round the neck. In the example of production of the sound from pressure and stretching combined, the navel-string was twenty-three inches long, of normal structure, and wound twice round the neck; the accoucheur was obliged to cut it during delivery, finding it impossible to slip it over the head. Here the peculiar sound was invariably heard on every examination; an unusual circumstance, attributed to the tightness with which the cord was twisted, whereby change of position or other occurrences, sometimes causing a temporary cessation of the sound, were rendered of none effect.

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[1] Medicinische Zeitung, No. xxxvii. 1839; and Br. and For. Med. Rev. July, 1840.

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For the American Medical Intelligencer.

Art. I.—HISTORY OF VACCINATION IN CHINA.

BY W. BECK DIVER, M. D.

Macao, May, 1840.

To the Editor of the American Medical Library and Intelligencer.

Dear Sir,

As the discovery of the vaccine virus forms an interesting and important part of the history of medical science, the following sketch of its introduction and progress in China may not be devoid of interest to the readers, or wholly unworthy of a place in the pages of your valuable journal.

In the spring of 1805, and whilst James Drummond, Esq., was at the head of the affairs of the honourable the East India Company in this country, the vaccine was brought by Mr. Hewit, a Portuguese subject and a merchant of Macao, in his vessel, upon live subjects from Manilla;—his Catholic majesty having had it conveyed by suitable means, and under the care of professional men, across the the South American continent, to his settlement in the Phillipine Islands. One of them, Sr. D. F. X. Balmis, stated himself to have introduced the practice of vaccine inoculation into this country; but before his arrival in China, it had been quite extensively conducted by the Portuguese practitioners at Macao, as well as by Alexander Pearson, Esq., chief surgeon to the British Factory, and a tract upon the subject (an abstract of which I subjoin) drawn up by this gentleman had been translated by Sir George Staunton into Chinese, and published several months before his arrival. As the inoculation among subjects connected with the foreign society, or with the settlement of Macao, was deemed nugatory towards an establishment of the practice in China, it was from the beginning conducted, first at some expense, by inoculations at stated periods among the natives,—and of them, necessarily, the poorest classes, who dwelt crowded together in boats or otherwise, so that (the small-pox being, invariably, an annual epidemic in this province,) its efficacy soon came to the test. By the time the British factory removed from Macao to Canton in that season, a degree of confidence had been established in its favour; and in the course of the winter and spring months of 1805–6, and during the raging of the small-pox (of which the annual period of attack is in February, and of its decline early in June,) the number brought for inoculation was great.

At that time it was considered judicious to endeavour to give the practice extension by vaccinating as many as possible, not fully aware of the characteristic apathy of the Chinese to what does not immediately appeal to their observation through the exigency of their sufferings or interests, and erroneously thinking that such a benefit, to be appreciated, required but to be known. Very many (it may be safely said thousands) were inoculated in the course of twelve months; and even under the circumstances stated, and in that early stage of the pursuit, no imputation was laid against the success of the practice which admitted of being traced,—an instance of good fortune the less to have been expected, because, in order to fulfil the views which had been taken of the most proper means for its dissemination, several Chinese were instructed in its details, and they practised it extensively, as well at a distance from as under Mr. Pearson's inspection.

When the small-pox ceased to be an epidemic, the evil and the remedy against it were equally forgotten; and great difficulty was found in procuring a sufficient number of subjects by means of which merely to preserve the vaccine. In fact, since its first introduction into China, it has been several times extinct; in two instances it was again brought from the islands of Leuconia. At two other times, when lost at Macao and Canton, it has been found to have been kept up in the country districts at considerable distance from either, but still within the province of Canton.

The practice spread greatly from among the lower classes of society, so as to have become general among the middling ranks, and to be frequently resorted to by those of the higher conditions.[1]

Reports of failure were occasionally spread; and although the difficulty of tracing such when stated was a great incidental drawback, and though the occurrence of variola, measles, pemphigus, and cutaneous eruptions, in persons previously vaccinated was attributed to the variolous infection; yet, upon the whole, the confidence in its efficacy, though gradually conceded, became full, grounded upon ample and annual evidence before adverted to, with fewer obstacles from prejudice than could be anticipated, especially in a Chinese community. The circumstances which in England had shaken the public confidence as to the practice were communicated to the Chinese inoculators, and it was endeavoured to see or learn the details of every case of rumoured failure. The result proved satisfactory, although at the time the investigation was made the small-pox had prevailed in a usual degree of severity, and was attended with mortality. Two descriptions of cases were traced: one in which the supposed vaccination had been with spurious matter, or otherwise imperfectly or unskilfully conducted; the other, when a modified small-pox had actually ensued after inoculations which had been made and had proceeded regularly. Of the first description, though numerous, none presented themselves who had been vaccinated under inspection, or at the Canton institution. Of the second the number was few, but too many to allow of any doubt as to the occurrence. In such cases, with from 50 to 200 eruptions, the fever was slight,—it went off when the eruption appeared, and that desiccated about the fifth day, leaving no marks; answering closely to the real phenomena of the chicken-pox, with which the Chinese are familiar, as occurring after small-pox, or variolous inoculation practised in their mode.[2]

From their medical practitioners, especially those who devoted themselves peculiarly to the treatment of small-pox, it at first met with strenuous opposition; and it may still be said to meet with little acceptation.

There remained only one prejudice to contend with, entertained against submitting the children to vaccination during the great heats of the summer and autumnal months, arising no doubt from an observation, generally just, that the majority of diseases attacking or brought on at these seasons are more than usually dangerous or severe.

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[1] During the spring of 1833, and partly, perhaps, in consequence of the unusual prevalence of the small-pox, the practice was very extensive in Canton, and a little grandson of the governor Loo was among the subjects vaccinated.

[2] The Chinese mode is to place a little of the virus, taken from a former patient, dried and reduced to powder, on cotton wool, and to insert this in the nostril. This practice is not unfrequently followed by blindness.

With a view to the removal of this impediment, some of the principal members of the Chinese corporation, in whom is vested the exclusive privilege of conducting the foreign trade, have established a fund for affording gratuitous inoculation to the poor at all times, especially framed, and judiciously so, to allot small premiums to those who bring forward their children at that objectionable period. The practice is conducted at their hall for meetings, commonly called the "Consoo House," by the Chinese vaccinator, and great numbers are there made the subjects of the virus, with a success equal, perhaps, to that of any other place in the East.

Though the practice met in this province with encouragement, it encountered singular obstacles in another quarter. After having extended to the province of Keang-sy, adjoining Canton to the northeast, it was suddenly dropped there, being opposed by the jealousy and cupidity of the Budhist priests, who, in that part of China, had a double interest in the *preservation* of the small-pox. In the first place, they were much employed in the business of inoculation after the Chinese method; and secondly, they were well paid for certain ministrations with their deities[1] to avert or mitigate the scourge. Thus it was that these worthies, who benefited by the harvest, always wished to leave a little for seed. The breaking out of the scarlet fever unfortunately afforded them plausible ground of crimination against a practice, which was said to retain the poison in the system, to appear at a future time in still worse shapes.

In the autumn of 1820, Mons. Despiana, French surgeon in the service of the king of Cochin China, arrived, bringing a letter from Mons. Vannier, then acting as minister to that sovereign, requesting furtherance to his mission, which was to convey vaccine to Cochin China, for which place he departed in February, 1821, and succeeded in his object.

It is known to have been conveyed again to Keang-sy, as well as to Keang-nan and Tuhkèèn provinces; it has also reached Peking, but unfortunately was again lost there.

On my arrival here last autumn, I found the virus extinct, and was informed that the small-pox the year previous had been unusually severe and destructive. Having occasion to visit Canton in December, on my return to Macao the same month, I brought with me a child who had been vaccinated at the Consoo House a few days previous to my departure by the Chinese vaccinator, Heen-qua, purser to Mow-qua, one of the senior Hong merchants.

The practice was thus revived again, and the virus freely circulated among the Chinese and Portuguese population. In order to ensure a considerable quantity of the lymph, and the return of the children to the hospital, several punctures were inserted into each arm, and the parents or guardians required to deposit a sum of money, which would be refunded on their return at the appointed time, the eighth or ninth day.

The virus having become extinct at Singapore, I enclosed some fresh lymph in wax, between plates of glass, and sent it down; and have had the pleasure of being informed, under date of April 3d, that its introduction was successful. There has always been great difficulty experienced by the physicians at Singapore in keeping up the vaccine, from what cause is not known. Whether the difficulty is equally as great with the native as with foreign population, I have not ascertained; perhaps a solution of this question may throw some light upon the subject.

The following is an abstract of the contents of a Chinese work on the Vaccine Inoculation, originally written in English, by Alexander Pearson, Esq., translated into Chinese by Sir George Thomas Staunton, Bart., and printed at Canton in 1805, at the expense of the East India Company, under the direction of James Drummond, Esq., then president of the select committee, and with the sanction of Grew-qua, a Chinese merchant of the privileged class.

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[1] They have one particular goddess called "Tèèn hwa shing moo," which has been construed "Our Lady of the Small-pox."

Origin of the small-pox,—when and where first known,—its dreadful ravages on the human frame and race. First introduction of common inoculation, a remedy, but an imperfect one,—description of it. At length the vaccine disease is discovered in England,—certain persons employed in milking cows are found not to contract the disease of the small-pox. This fact comes to the knowledge of Dr. Jenner,—he investigates the cause,—discovers blue pustules on the udder of the cow, and conceives the idea of applying the matter arising therefrom to the human body as a preventive to the contagion of the small-pox. On experience it is found that on the fourth day a pustule appears—on the eighth or ninth it fills with matter—and on the fourteenth disappears. The practice is approved, and extends all over Europe, Asia, and America,—millions are thus inoculated, and protected against the ravages of the natural small-pox. The king of Spain, highly approving of it, sends children who had been inoculated with this vaccine virus in his ships to various parts of his dominions, especially the Philippine Islands, from whence this vaccine matter has now, in the 4th moon of the 10th year of the reigning emperor, Kia-king, been at length obtained in China. The English and Portuguese physicians residing on the spot have introduced the practice,—some hundreds have already been inoculated, without one instance of failure. Recapitulation,—essential difference between the vaccine and the small-pox,—mode of inoculation minutely described,—progressive symptoms,—genuine pustule how distinguishable,—mode of conveying the virus upon needles to a distance,—false or spurious appearances described,—regimen proper to be observed by the patient.

Most respectfully yours,

W. Beck Diver.

Professor Dunglison.

Art. II.—ON THE CONTRACTILITY OF THE BLOOD-VESSELS.

BY DR. HENLE, OF BERLIN.[1]

The object of the author in the present paper is to offer anatomical evidence in favour of the views respecting the nature of inflammation which he expressed in his "Pathological Investigations," and of which we gave a full analysis in our number for April last. He now, in support of those opinions, advances that the structure of the middle coat of the artery is intermediate between cellular and muscular tissue; and that the vessels must therefore be liable to those changes of calibre under the direct or sympathetic influence of the nerves to which he believes that inflammation is due. With reference to his conclusions, we can only repeat the opinion given in the review already mentioned, that mere dilatation of blood-vessels is not inflammation, and that, even if it were proved that depression of the supposed motor nerves of the blood-vessels could result as an antagonist phenomenon of the excitement of the sensitive nerves, this would constitute but one, and not the most important part of inflammation. However, the present anatomical observations of the author are not much the less interesting because he makes them the groundwork of incorrect pathology; if true, they afford additional proof, and indeed the only evidence that was wanting, to establish that the blood-vessels are subject to changes of their calibre under other than mere physical influences. And it is but fair that this evidence should be supplied from the school of Müller, who has done so much to throw discredit on the opinions of those who regarded the fact as already reasonably demonstrated.

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[1] Casper's Wochenschrift, Mai 23, 1840; and Br. and For. Med. Rev. Oct. 1840, p. 551.

The microscopic elements of the middle coat of the artery are broad and very flat slightly granulated fibres or bands, which lie in rings around the internal membrane. In the innermost layers they readily break up into tolerably similar long rhombic lamellæ, which are much like flattened cuticle cells, but are longer in proportion to their breadth. Of these lamellæ some are quite homogeneous, others present at one part a dark oval spot of the form of the common nuclei of cells, which lies with its greatest diameter in the long axis of the lamellæ; and, lastly, on others this spot is drawn out into a longer and fine dark streak, which often extends over the whole lamella, but often over only a part of it, and often is replaced by a row of small dark points.

In the more external layers, the lamellæ unite into long and very seldom, if ever, branched fibres; the dark streaks also become connected together, not only joining with one another by their ends, but at the same time sending off lateral branches by which they anastomose. Thus the middle coat of the artery consists of numerous layers of granulated transverse bands (of 0·003 lines diameter), and of a system or network of dark streaks among them. These have some resemblance to elastic fibres, and have given rise to the opinion that this coat consists of elastic tissue. But a true elastic coat exists only on the larger arteries external to the middle one. The granulated bands of the middle coat dissolve in acetic acid, the dark branched streaks do not, and they may therefore by its means be easily demonstrated.

In the larger veins there is an exactly similar layer of transverse fibres next to the inner coat; but it is always very thin, and may be entirely absent. (In the inner coat of the veins, however, a longitudinal layer of such fibres, which is much thinner or absent in the arteries, is in general considerably developed.) If one follows these fibres outwards, it is seen how, though at first they were straight and stiff, they gradually assume the peculiar waviness of fasciculi of cellular tissue, and how at last there appears in them an obscure and then a more and more evident breaking up into separate parallel and tortuous filaments; for each granulated flat fibre there is a fasciculus of cellular tissue. The dark streaks on these fasciculi at first form a network like that which they present on the granulated fibres of the middle arterial coat; gradually they become finer and more translucent, the lateral branches fade, and nothing is seen but dark and very large wavy fibres, such as universally occur between the fasciculi of cellular tissue. These fasciculi become pale and dissolve in acetic acid; the fibres remain.

If the muscular coat of the stomach or of the intestine be examined successively from the serous to the mucous membrane, there are found externally lamellæ similar to those in the innermost layers of the middle arterial coat, with the same nuclei and the same development of the nuclei into streaks. Towards the mucous membrane the laminæ coalesce into broad fibres, the well-known organic muscular fibres which in their microscopic and chemical characters agree with the fibres of the middle coat of the artery, but which frequently exhibit obscure divisions into finer parallel fibres. The dark streaks are much finer, fewer, less branched, and more similar to the fine interstitial fibres of the cellular fasciculi just mentioned. The so-called muscular *fibres* of the stomach and intestines, then, correspond to the *fasciculi* of the cellular tissue and of the striated muscles.

I have not yet, says Dr. Henle, traced the transition from the organic muscular fibres to the striated muscular fasciculi, and I shall merely mention that in the latter also the system of dark interstitial fibres insoluble in acetic acid occurs sometimes in the form of nuclei, sometimes of longer streaks, and sometimes of extremely fine wavy fibres. It is well known that the organic and striated muscular fasciculi dissolve in acetic acid. The chemical difference between the middle coat of the artery and the muscles is explained by the predominant quantity of interstitial fibres in the former. The anatomical identity of the above-mentioned tissues in all essential points is thus, I believe, demonstrated: with the less essential anatomical differences there correspond differences of functions. The striated muscles are generally subject to the will, and react on mechanical and electric stimuli, but not on the application of cold; the heart is an exception, having striated fasciculi, but not being voluntarily moveable; the organic muscles react as the striated do, but are removed from the influence of the will; the middle coat of the artery is anatomically similar to the organic muscular membrane, it is, like them, involuntary, it reacts, like them, on mechanical stimuli, and also on the application of cold, but not of electricity; the contractile cellular tissues, for example, the tunica dartos, similarly involuntary, has the same relations to cold as the middle coat of the artery, but is not excited to contraction by mechanical impressions. In the animal muscles contraction following upon irritation is sudden and single; in the heart sudden and peristaltic; in the intestine slow and peristaltic; in the arteries and the cellular tissue slow and continuous.

The contractility of the larger arteries is proved by experiment, and we may venture to ascribe it to the smaller ones as far as they agree in structure with the larger, that is, so far as the layer of circular fibres is continued. Now this may be recognised on vessels of from 0·015 to 0·002 of a line in diameter, by rendering them transparent with acetic acid and examining them under the microscope. The interstitial dark streaks are then seen running straight or somewhat obliquely round the vessel, at distances from each other which are equal to the breadth of a granulated fibre, in single layers on the small, and in numerous layers on the large vessels. Separate fibres may also be exhibited on arteries of this size by tearing them. In smaller arteries, however, this is not possible; but even on those of 0·007 of a line in diameter (including their walls), there may be seen over the epithelium a layer of transverse, oval, and in part very elongated nuclei, which may be recognised as the origins of the dark interstitial fibres of the middle coat, by the circumstance that there is a gradual transition to the form of the latter, and that they already lie at the same distance from one another. Between them, therefore, the same substance must exist as between the interstitial fibres of the middle coat of the larger arteries, though it is not yet arranged in separate circular fibres. In vessels of this degree of minuteness, the distinctions between arteries and veins are no longer to be discerned. Capillaries of less than 0·007 diameter (the smallest are from 0·002 to 0·003) have indeed separate transverse oval nuclei, but they have no special middle coat. The smallest consist only of a thin quite structureless membrane, in which oval nuclei lie here and there in a longitudinal position; those that are something larger have an epithelium of nuclei within this structureless primary membrane.........

For the opinion that the contraction of the membrane of the vessels, like that of the muscles, is under the influence of the nerves, I can adduce an anatomical fact. Purkinje has seen fine nervous twigs on the cerebral vessels of sheep; and Valentin both on them and on many other blood-vessels; and I have myself often observed nervous filaments presenting the character of the so-called organic fibres on small vessels such as one can see undissected with powerful lenses. On a vessel of the pia mater of one fifth of a line in diameter, I saw such a nervous fasciculus (of 0·009 of a line in diameter) ascending to the upper wall of the vessel, which was turned towards the eye, then turning round it to its posterior wall, and then continuing its course in the same direction. I have seen this winding of the nerves round the vessels only on very small portions of the latter, but I have observed it so often that I cannot regard it as an accident. In one case a smaller fasciculus was given off; it consisted of only three or four fibres, and passed along the vessel.

Art. III.—ON THE OPERATION FOR STRABISMUS.

BY PROFESSOR DIEFFENBACH.[1]

Since my first communication on this operation, it has had such a general reception and has acquired such an importance as I did not at that time anticipate. Upwards of 300 cases have been operated on by me within a few months, and both in Berlin and in other places my proceeding has been frequently imitated. I propose to give here a short general view of the results of my observations.

The youngest individuals in whom I have undertaken the division of the shortened muscle of the eye were five years old: the oldest were upwards of forty.

Sometimes one, sometimes both eyes squinted, and the operation had generally the same favourable result in both cases. When both eyes were affected, I either operated first on that which squinted most, and when that was quite well on the other, or else on both at the same time.

Squinting inwards, from shortening of the rectus internus, was by far most frequent. Sometimes the trochlearis muscle was also shortened, so that it was necessary to divide it as well as the rectus. In the whole number of those I operated on there were only a few who squinted outwards, and still fewer in whom the eye was directed upwards, or upwards and inwards. I found no eyes at all that squinted downwards.

Strabismus upwards was sometimes complicated with blepharoptosis. The division of the rectus superior not only cured the squinting, but the ptosis gradually diminished after it.

Strabismus outwards or inwards was often complicated with nystagmus bulbi. After the division of the external or internal rectus, not only did the squinting cease, but in general the nystagmus also. In other cases, however, the latter was persistent, and did not decrease till after the division of the rectus superior, or obliquus superior, or rectus externus.

When cataract and strabismus coexisted, the operations for both were done at the same time, and the result was in every case favourable to both.

In most of the patients the strabismus had commenced in very early childhood, after ophthalmia neonatorum, scrofulous inflammation of the eyes with ulcers on the cornea, or after acute exanthemata, &c. In many there were cicatrices on the cornea or cataracta centralis. In cases of the former kind, in which hitherto artificial pupils would have been made, the operation was attended by success and considerable improvement of the sight.

All those who had strabismus of only one eye, saw more weakly with it than with the other; in those who squinted with both eyes, that which was turned least was usually the stronger. The weakness of the one eye had been observed by only a few of the patients; they had naturally looked only with the better eye, and the other had been unemployed. The operation completely cured the weakness of sight; some who had actually amaurotic amblyopia could see clearly directly after it was performed.

Some of the patients previous to the operation often saw double; this defect continued for some time after it, and then gradually ceased. Some others who had never seen double before did so immediately after the operation. These had been in the habit of looking only with their strong eye, while the other had been unused. The improved position of the latter compelled it to see; but the double vision was subsequently lost.

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[1] Casper's Wochenschrift, July 4, 1840; and Br. and For. Med. Rev. Oct. 1840, p. 570.

Some who were operated on did not see so well immediately after as before the operation; but after some exercise this weakness of vision ceased and they could then see quite clearly. The cause of this was, that when the eye was put in its normal position, a point of the retina which was before unexercised was now brought into play, and required some practice before it could fully discharge its functions.

Operation. That for strabismus convergens is here taken as the type. The operator always stands on the right side of the patient, whether he be operating on the right or on the left eye. The patient sits on a stool, and an assistant standing behind him draws up the upper eyelid with a Pellier's hook. A second assistant draws down the lower eyelid with a double hook, which is set in a handle, and of which the teeth are connected by a transverse piece. He kneels down before the patient so as not to be in the way.

The operator then puts a fine hook into the conjunctiva at the inner angle of the eye, just where it is passing from the palpebræ to the bulb, passes it superficially through it, and gives it to a third assistant who stands on the left side of the patient. The operator next passes a second hook in the same way through the conjunctiva, about a line and a half from the first. He and his assistant then both at the same time draw their hooks a little up, so as to raise a fold of the conjunctiva, and at the same time pull the bulb somewhat outwards. The fold is then divided with a pair of curved eye-scissors; and this cut usually at once exposes the tendon and the anterior part of the muscle. A couple of cuts with the scissors then expose the outer surface of the muscle; a rather blunt hook is passed under its tendon, and the two sharp hooks that held the conjunctiva are now removed; the eye is held completely in the power of the blunt hook, and is to be drawn by it from out the internal angle of the orbit. A flat probe is then pushed under the muscle, and the loose connection by cellular tissue between it and the eye is broken up. The division of the muscle is made by the scissors already mentioned, either, first, through the tendon in front of the hook; or, second, behind the hook, at the beginning of the muscular substance; or, third, some lines deeper back.

When the tendon is divided, nothing of it remains on the eye, and the muscle commonly retracts a line backwards. When the muscle itself is divided at its anterior part or further back, its posterior portion retracts, and the anterior, which remains connected with the bulb, turns forwards like a loose flap, which, according to circumstances, may be removed by the scissors or pushed back into the wound if it is thought desirable that it should unite again with the posterior portion.

In practised hands the whole operation seldom lasts more than a minute; and it is done almost without pain. When finished, the eye is cleaned with cold water and a soft sponge. The after treatment consists of cold lotions, and very great abstinence from food and strong drinks. The patient should be kept in a darkened room. In most cases the wound heals very quickly, and after a few weeks no traces of the operation remain, and the eye stands in its normal position.

The operation for internal strabismus is by far the most easy; the division of the obliquus superior for squinting upwards and inwards is more difficult; that of the rectus internus for strabismus divergens is more difficult still; and the most difficult of all is the division of the rectus superior for squinting upwards. With respect to the manipulations of these operations, they are just the same as those for strabismus convergens.

Remarks on the operation. The fixing of the upper and lower eyelids with the elevator and the hook, so as to expose the whole of the anterior surface of the globe, is indispensable, for neither the will of the patient nor the separation of the lids by the finger can do this effectually.

The fixing of the globe can be accomplished only by fine hooks carried superficially through the conjunctiva; the seizing and elevation of the fold of conjunctiva by forceps sounds more gentle than to do it with a sharp hook, but it is in reality far more painful, more injurious, and more insecure; the fold raised up by the forceps easily tears or slips from their grasp, and if the forceps are made with hooks, they wound as well as pinch the membrane. Two hooks must be employed to make the fold tense enough.

The great number of operations that I have performed has given me opportunity of observing the phenomena that ensue subsequently to them, and their after consequences. The question here is only of internal strabismus, but any surgeon will easily supply the necessary modifications for the operations in the other varieties. In the first case, the eye after the division of the muscle goes into its normal position. In the second it remains in some degree squinting. In the third it turns outwards.

In my first operations, the position of the eye after the division of the muscle was left to chance, but I gradually succeeded in getting it into my own power to determine it. If there be the slightest degree of convergent strabismus, only a very small opening should be made in the conjunctiva, and the tendon only divided close to the eye, without separating the muscle from the globe. In this case the eye at first almost maintains its previous position, but after some weeks it becomes straight. If the conjunctiva be more extensively divided, and if the under surface of the muscle be separated from the globe with a probe and then cut across, the squinting is at once nearly or completely removed. If the conjunctiva be divided over a greater arc and towards the back of the globe, if the cellular tissue be extensively separated and the muscle be detached far back and divided at its middle, then the eye, even in cases in which the whole cornea was before hidden in the internal angle, stands quite straight after the operation.

Hundreds of those whom I have cured have been seen by our own and by foreign medical men, and it was often impossible to distinguish the eye that had squinted from the other.

In some who still squinted slightly after the operation, the position of the eye was made perfectly normal by tying up the sound eye and rolling the globe forcibly outwards so as to stretch the newly-formed uniting substance. In others of those whom I first operated on, in whom I had not adopted this after measure, I repeated the operation; and I found that in fourteen days after its first division the muscle was again intimately united with the globe, and that with the exception of a slight thickening and induration of this part, there was no indication of a previous operation.

Immediately after the operation the eye can be moved inwards by the superior oblique, and at a later period by the divided muscle, which has again united with the globe. In several persons in whom the muscle was divided deeper in the orbit, the eye turned outwards some weeks after the operation, so that there was actually an external strabismus. If the divergence was but slight, it was often sufficient to snip (*betupfen*) the conjunctiva at the inner angle, so as, by the shortening of the membrane that was thus produced, to bring the eye into the middle. But if the divergence was greater, I then divided the external rectus and the eye became straight again, especially when I at the same time removed a fold of conjunctiva from the internal angle, for the cicatrix that then followed tended to draw the globe inwards. If the eye, notwithstanding the division of the external rectus, still remained turned outwards, I then, after dividing and separating that muscle, tied a thread as fine as a hair upon its tendon, and with this pulled the eye forcibly inwards. The end of the thread was then drawn tightly across the bridge of the nose and fastened to a piece of good adhesive plaster, which was stuck upon the opposite side. The result for the most part surpassed my expectations.

BIBLIOGRAPHICAL NOTICES.

A Second Appeal in regard to the Insane Poor.[1]

It may be recollected by many of our readers, that nearly two years ago an appeal was made to the people of Pennsylvania on the subject of an Asylum for the Insane Poor. This appeal was prepared by the committee of which the editor of this Journal was chairman, and it was published in the "Library" department. Subsequently, memorials were sent to the senate and house of representatives, before whom a bill was introduced, accompanied by a report from Mr. Konigmacher—the chairman of the committee to whom the subject had been referred.

The bill passed the house of representatives with but slight opposition, and the senate unanimously; but on account of the exhausted condition of the treasury, it did not receive the sanction of the executive. Governor Porter, however, deplored—in feeling language—"the stern injunctions of duty, by which he was governed," and expressed his belief, that "at no distant day the Commonwealth would be so far extricated from her embarrassments as to be able, without inconvenience, to accomplish the laudable undertaking."

"Participating," observes the preface of this "Second Appeal," "in the benevolent sentiments expressed by Governor Porter; impressed with the irreparable evils which must result from delay, and believing that the period had arrived for farther action, and that certain objections which were made against the former bill could be entirely obviated, the committee of citizens, at a meeting held on the 25th of September last, appointed a sub-committee, consisting of Robley Dunglison, M. D., Isaac Collins, and the Rev. C. R. Demme, D. D., to prepare a second appeal to the people of Pennsylvania, which should embrace such portions of the former appeal, and of the report made to the legislature, and such other information, as the sub-committee might think proper.

"At a meeting of the committee, held on the 9th of October, 1840, the sub-committee, through their chairman—Dr. Dunglison—reported the following appeal, which was approved; ordered to be printed, to be signed by the chairman and secretary of the committee, and to be published under the direction of the sub-committee in such form as to secure its most extensive circulation."

Remarks relative to Dr. Paine's Commentaries upon the Writings of Louis, by H. I. B.[2]

These remarks appeared originally in the Boston Medical and Surgical Journal, and were written—the author states—"under the influence of the keen feelings produced by the unfairness, as he thought, of Dr. Paine, in his criticisms upon Louis's writings." These feelings are but too perceptible in the remarks. The author is an estimable individual; but his zeal for a favourite preceptor has outrun his discretion. The "remarks" are polemical throughout, and often—what is always to be deprecated—personal.

Dr. Paine is engaged in replying to them in the same Journal; and under the provocation is rendering himself liable to a similar animadversion.

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[1] A Second Appeal to the People of Pennsylvania on the subject of an Asylum for the Insane Poor of the Commonwealth. 8vo, pp. 35. Philadelphia, 1840.

[2] Pp. 32. Boston, 1840.

MISCELLANEOUS NOTICES.

Experimental Researches on the Functions of the Encephalon, considered in relation to Sensation, Station, and Progression. By M. Monat.[1]—This is a long report to the Royal Academy, in which the author, after proving the insensibility of the brain, endeavours to point out the functions of its different portions. In this, however, he has but partially succeeded, and the committee, MM. Ribes, Blandin, Amussat, and Bouillaud, come to the following conclusions: 1. That the three great nervous centres, the spinal marrow, the cerebrum, and the cerebellum, have distinct and special functions. 2. That sensation, properly so called, and motion, are under the immediate and direct influence of the spinal marrow, and have each particular nerves. 3. That the brain presides over the various manifestations of intelligence and volition. 4. That the cerebellum plays an important part over the functions of *progression* and *station*. As to the functions peculiar to particular parts of the nervous centres, much yet remains to be done for their determination.

On the Production of Chronic Ventricular Hydrocephalus, in consequence of the pressure exercised by tuberculous masses of the Cerebellum on the Straight Sinus. By M. F. Barrier.[2]—[The object of this paper is sufficiently evident from its title; two cases are carefully narrated, which at least prove coincidence of the two anatomical states referred to, while analogy favours the notion that the obstruction to the return of the blood through the straight sinus may have been the cause of the local dropsy. These cases the author himself candidly admits may be of very rare occurrence; nevertheless, as we agree with him in regarding the point as one of no mean interest, we extract some of his general remarks respecting it.]

The anatomical conditions capable of explaining the production of this form of hydrocephalus are: 1, the presence of the tuberculous mass in the *middle lobe* of the cerebellum; 2, its forming a considerable projection on its superior surface, so as to push the tentorium cerebelli upwards and exercise pressure on the straight sinus Other conditions conducing to the same result might also be encountered; thus inflammation might lead to adhesion of the tumour with the tentorium, and gradually spreading to the interior of the sinus, determine the formation of a coagulum, which in its turn would oppose the circulation of the blood returning through the venæ Galeni from the ventricles; these veins might also undergo pressure on their egress from the fissure of Bichat. It is evident that obliteration of these vessels, as well as of the straight sinus, can only produce one species of hydrocephalus, that of the ventricles, as the veins springing from the walls of these cavities form a system apart.

There may, it is true, be found in authors numerous cases of tuberculous growth in the cerebellum unattended with ventricular dropsy; but it will be perceived, in all those related with detail, that the tumour was seated either in the lateral lobes or at the inferior surface of the cerebellum, or that, if developed at the upper surface, it did not protrude upwards sufficiently to exercise pressure on the straight sinus. On the other hand, chronic non-congenital hydrocephalus is frequently seen without coincident tumour in the cerebellum.

On the Danger of applying Leeches which have been previously used. By M. Puche.[3]—The transmission of virus by the fangs of leeches is an important question, and worthy of examination. M. Puche, physician to the hospital of Midi, has treated a patient in his wards, who affords a convincing proof of the danger of employing leeches which have been employed before. A messenger, æt. 24, was admitted into the hospital with urethritis of four months' standing, which had been recently complicated by acute inflammation of the epididymis. The epididymitis was the consequence of excessive labour, not of arrested discharge. Many applications of leeches were made to the hypogastric region for its removal. Five of the leeches applied were purchased at a low price by the nurse. Their bites inflamed, and took the aspect of Hunterian chancres. Now these syphilitic ulcers were too recent to have arisen from the same impure connection that produced the gonorrhœa; but as it was possible that they were occasioned by the gonorrhœal matter comming into contact with the leech-bites, M. Puche, to satisfy himself, inoculated one part with the whitish discharge, and another part with the pus of the ulcers, on the 28th of February, 1840. On the 4th of March the inoculation of the urethral matter had produced nothing, while that of chancres had given an ecthymous pustule, which had the regular development of syphilitic pustules, and terminated by an indurated and coppery cicatrix. It is argued that the ulcers proceeded from the leech-bites, (the leeches had certainly been employed on a syphilitic patient,) and that they had conveyed the infection from one patient to the other. The possibility of this transmission may be granted; but other experiments are necessary to prove it, and to determine whether the leeches are not destroyed by the virulent principle they imbibe; whether the poison is destroyed by them; and if so, at what period do they become innocuous.

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[1] Bull. de l'Acad. Roy. de Méd., Juin 17, 1840; and Br. and For. Med. Rev., Oct. 1840, p. 554.

[2] Gaz. Méd. de Paris, No. 17, Avril, 1840; and Br. and For. Med. Rev., Oct. 1840, p. 559.

[3] Bulletin Général de Thérapeutique, Juillet 30, 1840; and Br. and For. Med. Rev., Oct. 1840, p. 563.

On a New Species of Strangulation in the Tunica Vaginalis Testis, followed by Internal Strangulation. By M. Laugier.[1]—M. Laugier, surgeon to the Hospital Beaujon, presented to the academy a pathological specimen, which is an extrordinary example of the above strangulation, caused by a circular fold of peritoneum, the edge of which surrounds the superior orifice of the inguinal canal, and the free border of which floats in the abdomen, forming a sort of prolongation of the inguinal canal. It was formed by a double fold of peritoneum detached from the anterior wall of the abdomen. It was easily passed into the tunica vaginalis (like the finger of a glove cut off) from ten to twelve lines. It was returned with equal facility. A portion of small intestine, about a foot in length, had pushed this production before it in passing into the sac of the tunica vaginalis, and became strangulated by the floating ring. The strangulation, therefore, was not at the neck of the sac, as usually occurs in congenital hernia; neither was it an encysted congenital hernia, for there was no secondary sac, but a ring at the free part of the floating fold. The reduction of the strangulated hernia produced the separation of the circular band which surrounded the intestine, and the external strangulation became internal, without there being any possibility of suspecting before death a similar course of strangulation in the tunica vaginalis and internal strangulation.

The dissection revealed the existence of a similar fold on the opposite side, and the patient had a congenital reducible hernia in the left groin. But as there was neither strangulation nor rupture, the free border of the fold was rounded, and not broken as on the right side. No similar disposition of parts has been hitherto recorded. If it had been possible to suspect it during life, it is not likely that an attempt at reduction would have been made, for the reduction itself was the cause of the strangulation, in producing rupture of the fold. Gastrotomy was the only operation that could have been practised, but the rapid death of the patient prevented this.

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[1] Bulletin de l'Académie Royale de Médecine, Juin 30, 1840; and Br. and For. Med. Rev., Oct. 1840, p. 565.

Peritonitis from Injections into the Uterus, the Injections passing through the Fallopian Tubes into the Cavity of the Peritoneum. By M. Hourmann.[1]—A patient who was in the hospital of Loursine, under M. Hourmann, labouring under leucorrhœa, was ordered an injection into the uterine cavity. It was administered by means of a clyster pump, and at the first stroke of the piston the patient uttered a sharp cry, and pressed the hand strongly on the left iliac region. Symptoms of metroperitonitis came on, and the most energetic treatment was adopted. It being an important practical point to determine whether peritonitis was likely to ensue from uterine injections, several novel experiments were made in the hospital of Loursine to determine whether liquids would pass along the Fallopian tubes into the cavity of the peritoneum; and it was found that injections with an arterial syringe passed into the tubes. Abundant injections by means of syringes double the size of urethral syringes passed into the tubes, preceded by a certain quantity of air. In some few cases small quantities passed quite through the tubes. As this matter is to undergo further examination, we shall defer further notice of it at present.

On the Radical Cure of Inguinal Hernia by the Horizontal Position, after the plan of M. Ravin. By M. Biagini.[2]—A man, thirty-two years of age, consulted M. Biagini on account of a tumour in the left inguinal region, which this physician considered to be an entero-bubonocele, and which had resisted all efforts at reduction. M. Biagini proposed a long continuance in the horizontal posture to the patient, aided by compression, but he refused it. A year afterwards the man was obliged to put himself under treatment for articular rheumatism, complicated by pericarditis. After three months decubitus, which was consequent on the rheumatic affection and its treatment, the hernia did not exist, nor could it be made to appear by any effort or coughing. M. Biagini felt assured that the left external inguinal ring was singularly contracted. He considered this case as confirmative of the views of M. Ravin, and drew the following conclusions: 1. It is possible to obtain a radical cure of some herniæ by a long continuance of the horizontal position. 2. The cure takes place by a diminution in the size of the canal and the retraction of its walls, by which the lost obliquity is restored. These changes occur solely by the *vis tonica* of the tissues. 3. Though the tissues possess sufficient *vis tonica* to bring about the desirable changes, it is necessary that the general strength of system of the patient be somewhat considerable.

New Operation for the Cure of Vaginal Cystocele. By M. Jobert, Surgeon to the Hospital of St. Louis.[3]—The following is the substance of a report made to the Royal Academy of Medicine, by a committee consisting of MM. Blandin, Danyan, and Gimelle.

M. Jobert divides his memoir into three parts: in the first, he treats of the history of the disease, and the modes of treatment which have been hitherto employed for its removal. In the second, he proceeds to point out his method of obtaining a radical cure. In the third, he gives some new ideas, based on his pathological researches, with regard to the mode of formation of the cystocele.

Vaginal cystocele was treated of in the work of Leblanc, printed in 1775. Since that time, many surgical authors have noticed it; all have attributed it to a rupture or abrasion of the anterior wall of the vagina, allowing the bladder to pass into the cavity of the former, filling it by its distention, and causing a projection, more or less considerable, through the os externum. Until lately, palliative means alone have been adopted, which were totally incapable of effecting a radical cure. Pessaries under all forms can be but palliatives.

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[1] Gazette Médicale, Juillet 11, 1840; and Br. and For. Med. Rev., Oct. 1840, p. 566.

[2] Bulletino delle Scienze Mediche, Gennario, 1840; and Br. and For. Med. Rev., Oct. 1840, p. 569.

[3] Bulletin de l'Académie Royale de Médecine, Mai 15, 1840; and Br. and For. Med. Rev., Oct. 1840, p. 575.

The well-known operations of Marshall Hall and Dieffenbach have been performed with success by Berard and Velpeau in cases of prolapsus uteri, in which the bladder and vagina have been also drawn down; by these means the displaced parts may be retained within the cavity of the vagina; but in cystocele, M. Jobert says the bladder has an abnormal magnitude, and although it does not project from the vulva, it is nevertheless displaced, resting in such a manner on the perineal surface of the vagina, that the anterior wall of the bladder becomes superior. Thus, after the operation just named, though there is not external projection, the organ is not able to regain its ordinary size or position.

M. Jobert considers that in order to effect a radical cure, three things must be done: first, the bladder must be restored to its natural situation; second, the anterior wall of the vagina distended by the tumour must be reduced to its ordinary proportions, so as to maintain the bladder when replaced; but this latter result cannot be obtained by causing a loss of substance in this wall, and reuniting the edges according to the method of Hall, without injuring the orifice of the vulva. The proceeding has also entailed great difficulties in its execution, and possibly severe accidents, therefore the author substitutes, thirdly, the following method: He incloses within two curved transverse lines an oval space, more or less considerable, on the posterior surface of the tumour, or the anterior surface of the vagina, by means of caustic, so as to form an isolated spot, repeating the application of the caustic until the mucous membrane is destroyed. He then pares the edges with scissors or a bistoury, draws them together, and maintains them in apposition by means of straight needles, the points of which are removed, and a twisted suture.

Jobert operated in this manner on the 23d of July, 1838, on a female aged forty-five, of strong constitution, who presented at the aperture of the vulva a very large cystocele, which elevated the nymphæ and descended above the urethra and clitoris. The tumour was reddish. The patient easily returned and reproduced it. She often experienced acute pains in the abdomen, and the tumour became excoriated from friction. She had frequent desire to pass urine, the emission of which was often difficult. The tumour was five inches in length, from the orifice of the urethra to the neck of the uterus, and eight inches in circumference.

Seven needles were applied: four large and three small ones. They were lance-shaped, and were contained in sheaths, which alone were left to retain the threads when the suture was made. One of the large needles was applied to each extremity of the oval formed by the circumscribed space, two others in the middle, the small ones filling up the intervals. A sound of gum elastic was introduced into the bladder, and left there in order to prevent the accumulation of urine, and the distention of the viscus. The reunion of the edges of the wound arrested the flow of blood, and no accident occurred. Four of the sheaths of the needles which retained the sutures were removed on the 3d of August, the others fell of themselves on the 5th and 7th. The sound was discontinued on the 20th of the same month. The woman returned to her occupation as a laundress, and at the end of the month of January, 1839, the time at which she was examined, nothing unfortunate had happened.

Since this time two other cases, presenting the same symptoms as that just related, were operated upon in the same manner by M. Jobert, and the result in all the cases has been equally favourable. Two of the committee appointed by the academy were able to testify to this in one case.

But after the cure of these patients, the anterior wall of the vagina underwent a contraction throughout its whole length, and the uterus was proportionally prolapsed. M. Jobert now prevents this inconvenience by applying the caustic in a vertical instead of transverse direction. In this way the vagina is retained, and remains of its full length, the uterus suffering no displacement.

Jobert has shown by his pathological researches that the anterior wall of the vagina is neither ruptured nor abraded in the displacement of the bladder called cystocele, but that this disease is the result of the relaxation of the superior pelvic fascia, which, having been distended by the elevation of the womb in successive pregnancies, loses its elasticity, and no longer sustains the anterior wall of the vagina after delivery in a proper manner; and in this case a fall, an effort, the habit of retaining the urine in the bladder for too long a period, and in too great a quantity, are causes sufficient to produce the disease.

Jobert performed the same operation with success in a case of eversion of the mucous membrane of the posterior wall of the vagina; and the committee are of opinion that it may be practised in similar states of the same tissue in other natural passages.

Therapeutic Considerations on Obliterations of the Veins in the Treatment of Varix and Varicose Ulcers. By M. Jobert.[1]—In this paper, M. Jobert relates six cases, and states that he could describe twelve others, in all of which the treatment of varicose veins by producing the obliteration of their trunks by needles and twisted sutures, or other means, though at first it seemed promising, had ultimately proved completely unsuccessful. In all the patients who were thus treated, the varicose ulcers returned a short time after they left the hospital, as it was believed, perfectly cured; and the return took place in these cases more rapidly than in all probability it would if only the ordinary treatment by rest, poultices, and bandages had been pursued.

[After the statement of these facts and those recorded by Bonnet, (Brit. and For. Med. Rev. No. ix. p. 252,) few will hesitate to agree with the author that the obliteration of the veins by the needle and suture, however harmless an operation it may be, is not one which the surgeon has any authority or encouragement in undertaking in the treatment of varicose ulcers. The histories of the cases hitherto published in this country have not extended to the period after the operation at which the fair promises that it affords at first are dispelled.]

We extract from the British and Foreign Medical Review the following epitome of cases in some of the British journals, for the quarter ending August 31, 1840.

EDINBURGH MEDICAL AND SURGICAL JOURNAL, JULY, 1840, No. 144.

Observations on the Diseases of Peru. By Archibald Smith, M. D.—This is the conclusion of the paper noticed in our last number. It contains some interesting details, particularly on the influence of climate and locality on hæmoptysis and phthisis.

Cases of Great Enlargement of the Stomach: with Remarks. By J. H. Peebles, M. D., Physician to the Edinburgh Infirmary.—This is a monograph consisting chiefly of a collection of cases from various authors. It will be useful for reference to the practical physician.

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[1] Bulletin de Thérapeutique, Mai, 1840; and Br. and For. Med. Rev., Oct. 1840, p. 577.

Cases of Deformity of the Feet cured by the Operation of Stromeyer. By Robert Thomson, Esq., Surgeon, Dundee.—The author here gives the results of fifteen cases, seven of which are detailed at length. The treatment was highly creditable to Mr. Thomson, and his paper merits the notice of surgeons.

On Anomalous Affections of the Respiratory Organs. By John Gardner, M. D., Edinburgh.—Cases of this kind must be familiar to practitioners of experience in hysterical females of feeble frame, and who are often said to be the subjects of spinal irritation. Dr. Gardner calls attention to the employment of *blisters to the nape of the neck,* as found useful in such cases; and he suggests the same remedy, on theoretical principles but from a fair analogy, in hooping-cough and laryngismus stridulus.

On Nervous Headache from Exhaustion, and its Treatment with Aconite. By T. H. Burgess, M. D.—Dr. Burgess notices two conditions of system in which nervous headache is apt to ensue: one of general anemia; the other debility from nervous exhaustion. In these, and also in other kinds of headache, he has found the extract of aconite, in doses of rather less than a grain given every two or three hours, very useful.

On the Action of Hydrated Sesquioxide of Iron on Arsenic. By Douglas Maclagan, M. D., &c.—This is a valuable paper, and confirms the results previously arrived at of the antidotal powers of this salt of iron. Dr. Maclagan further proves that the salt acts chemically on the arsenious acid. He is of opinion that it is better fitted for removing the arsenic from its solution when precipitated by ammonia than when precipitated by potash, and that it answers better when preserved moist.

DUBLIN JOURNAL, JULY 1840.

On Cod-Oil. By M. Donovan, Esq.—This has been a good deal used on the continent of late years as a remedy in scrofula, (see Br. and For. Med. Rev., vol. viii. p. 554, and vol. ix. p. 553,) and with supposed benefit. The present paper is valuable in showing how this medicine can be rendered palatable, which is effected by using a temperature in its expression not exceeding 192°. But Mr. Donovan's paper merits perusal.

On the Utility of the Oxymuriate of Mercury in the Strumous Ophthalmia. By John Hamilton, Esq.—In addition to the usual local remedies, Mr. Hamilton employs with the greatest advantage this preparation of mercury internally, in doses of from one sixteenth to one eighth of a grain, in Tinct. or Decoct. Cinch., twice a day. This practice he borrowed from Sir P. Crampton, who learned it from Dr. M'Evoy. Mr. Hamilton gives several cases illustrating the great efficacy of the treatment.

On the Hydrocyanoferrate of Quinina; a febrifuge of greater power than the Sulphate. By M. Donovan.—This remedy has been employed in Italy, and is said to answer where the ordinary salt fails. Mr. Donovan gives formulæ for the preparation and administration of the remedy.

THE

AMERICAN MEDICAL INTELLIGENCER.

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For the American Medical Intelligencer.

Art. I.—CASE OF FIBRO-SCIRRHOUS TUMOUR,—CONTINUANCE FIFTEEN YEARS,—DEATH,—NECROSCOPY,—REMARKS.

BY JOHN S. ROHRER, M. D., OF PHILADELPHIA.

History.—Miss S., of delicate and slender frame, aged fifty-four years, died on the 7th August, 1840. She was of scrofulous habit, and subject to glandular swellings of the neck. Fifteen years previous to her decease, she first observed a tumidity of her abdomen, which produced a sensation of fulness and distention. From this time her *catamenia* ceased to flow, and were never afterwards restored. The abdomen continued to enlarge, which circumstance, and the sudden suppression of the accustomed secretion, caused some apprehension on the part of her too solicitous friends, calculated to *reflect* upon her heretofore fair and unsullied character. In due time, however, her faded complexion and emaciated form, together with an increase of her malady, dispelled their ill-grounded suspicions, and convinced them that there was no rational cause either to affect the matron's pride, or raise the virgin's blush. Previous to this she enjoyed good health. Her skin soon became sallow, and, towards the termination of her complaint, of an earthy hue. Her appetite was generally good. During the long period of the gradual developement of the tumour, she was not prevented until within six weeks of her death, from attending to her accustomed daily avocations. Towards the close of her malady there was some cough; difficulty in moving about; a "sense of bearing down;" occasional abdominal pain; dyspeptic symptoms; swelling of the feet and legs; paroxysms of chills and fever. Her body was much emaciated, and it was with great difficulty that her feeble and exhausted frame could sustain the enormous load with which she was obliged to move about. Her bowels were constipated, and great pain was produced by evacuating their contents; her urine could not be voided without an assistant to push up the tumour from the brim of the pelvis, for the purpose of allowing the urine to escape from the neck of the bladder.

August 7th, 1840. *Necroscopy five hours after death.*—There are scrofulous enlargements of the glands of the neck, behind the ears, and under the chin, most of which are cicatrised, and a few ulcerated.

The lungs on the anterior surface are of a dark red colour, and upon pressing portions between the fingers, numerous little hard bodies are felt, varying in size from a millet seed to a garden pea. The anterior lobe contains many of these tubercles clustered in bunches, and forming a considerable mass. They resemble the *miliary tubercle* of Laennec. Other portions have the natural spongy structure and the crepitous feel.

Upon opening the cavity of the abdomen, an irregular ovoid tumour is seen anterior to the intestines, and occupying the hypogastric, umbilical, and epigastric regions, extending into the pelvis, and filling its entire cavity. After carefully removing the tumour from its different attachments, it weighed *forty-five pounds*, and measured from the apex to its base *twenty-one inches*, through its lateral portion *nineteen inches*, and from the front to its back surface, through the centre, *nine inches*.

The liver, spleen, pancreas, and kidneys were normal.

The tumour had a covering of the peritoneum, which kept it in its situation, and bound it firmly to the parietes of the abdomen, to the intestines, pancreas, spleen, uterus, and bladder. The whole length of the *colon* was attached to it by strong adhesions. The uterus lay in front, and the broad ligaments were stretched over it at the lower portion where it emerged from the pelvis, and adhered firmly to its lower surface. The *Fallopian tubes* and *ovaries* were normal, and could be traced in front of the lower portions of the tumour on each side of the uterus, strongly attached to it. The bladder was also in front of the tumour, and fastened to it. This viscus, as well as the uterus, was pushed above the brim of the pelvis, and the necks of both were very much elongated. Many blood-vessels supplied the tumour from these attachments.

The tumour appears to have originated either in the cavity of the pelvis or abdomen, and by its gradual enlargement pushed the peritoneum before it, which gave it a covering and supplied it with blood-vessels. The external surface presented a smooth and uniform appearance. Upon making a section through the middle portion, a crepitus is produced by the edge of the scalpel. The internal substance exhibits a variety of appearances, generally of a whitish colour, but some portions of it have a blueish, others a dusty gray and yellow colour.

The whole appears to be a mass formed by the aggregation of tumours or lobules in their progressive developements. The consistence and structure varies, portions being of a loose structure and containing cells. The greater mass is *hard* and intermixed with *cartilaginous* and *bony matter*. The upper portion of the tumour is composed of a homogeneous substance of almost cartilaginous consistence, and mixed with a substance of less density of a whitish colour. Lower down it represents a dense substance resembling a section of pork. Throughout the greater part its consistence varies from that of fresh pork to boiled udder or brain. A large quantity of this carcinomatous matter throughout the whole tumour is accumulated in cells. In some places the lardaceous substance forms a homogeneous mass of considerable bulk. Fibrous matter, mixed with glandular substance, is seen throughout the whole tumour. Red points can also be traced in different parts, of the colour and consistence of the fibrine of blood.

Portions of it again are composed of almost entire osseous matter; spicula of bone are seen at different points, of an inch in length and a line in thickness.

In the centre of the tumour is a large cavity containing a fluid of the consistence of cream, intermixed with shreds of cellular tissue, detached blood-vessels, and a curdy matter of a grayish colour. There are other smaller cavities containing serum.

I will not further attempt to enter into details, but will content myself with saying, that after a minute and careful examination of the different structure and consistence of the tumour itself, and a comparison with Professor Carswell's "Illustrations of the Elementary Forms of Disease," I am satisfied that in this interesting specimen, the scirrhous, lardaceous, mammary, medullary, and hæmatoid forms are all combined.

J. S. Rohrer, M. D.

Chestnut street, Nov. 22, 1840.

Art. I.—FUCHS ON THE INFLUENCE OF PROFESSONS ON HEALTH.[1]

Professions, in medical statistics, may be considered certain determined combinations of external circumstances to which classes of men are exposed. Their influence is much more powerful and obvious in India, where they are hereditary, than in Europe; yet several professions in Europe have a remarkable effect in modifying the extent of sickness and death to which their members are liable. Before this full effect can be determined, extended series of observations, made by different individuals, must be collected; and the observations must embrace all essential facts, capable, like other facts in physical science, of being compared. To determine the relative health of any profession or class of men, and the deleterious influence of any circumstance in which they may be placed, the facts required are simple and few; but it is very rare that they can all be obtained, or at least are all furnished by writers. In the first instance, it is necessary to ascertain the number of individuals in each profession between the ages of 10-20, 20-30, &c., and then the total cases of disease, the average number constantly sick or the days of sickness, and the deaths in a determined time; from which data the annual diseases and deaths in 1000, and the average proportion of sick at all ages may be deduced. The sicktime and mortality in an assumed unit of lifetime thus becomes a determined quantity, which may be compared with any other quantity. To give an example: in the island of Corfu[2] the average force of the British troops was 1974·5 during the six years 1816-21; equivalent to 11,847 (1974·5×6) years of life, 620 of which were years of sickness. The total number of cases treated amounted to 14,098. Whence it is found by direct proportion that in a year 1000 soldiers living suffered 1190 attacks of sickness; that 52 of them were on an average constantly ill, and that 27 died. Of 1000 cases treated, 23 terminated fatally. A table in which these results were compared with those presented by other classes of men, would constitute a law of health for professions: it would teach the medical practitioner how many patients in a known population he may expect to attend; the general on how many effective men he may count in a campaign; the government how the labouring, manufacturing, agricultural, and higher classes are affected by political or economical measures. The sick-clubs and self-supporting dispensaries can only be firmly established by a knowledge of the quantity of sickness in the class they embrace; and if they enter every individual, distinguishing the age on their books, they will soon be in possession of a mass of useful facts.

The observations of Professor Fuchs were collected from the reports of a trades' institution in Würtzburg, to which each workman employed contributed weekly, in order to obtain a certain sum in sickness. These reports, published since 1788, distinguish the contributions of each trade; the deaths and attacks of sickness occurring in each trade have been distinguished from the first: and from these contributions and payments the learned professor has been enabled to ascertain that, since the foundation of the society in 1786 (49 years), the average number of contributions has been 1186; the same as if 58,125 members had lived and been occupied in their respective arts one year in Würtzburg: 275 cases of sickness and nine deaths occurred on an average annually; for the total attacks of sickness in 49 years amounted to 13,268; the deaths to 445. Of 10,000 contributors, 2,282 fell sick, and 76 died, yearly; and of 10,000 cases treated, 327 (1 in 29·8) ended fatally. The value and defect of Professor Fuchs's method of inquiry are sufficiently obvious; but we shall compare it with what was said before, to impress the right method more forcibly on future observers.

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[1] British and Foreign Medical Review, October, 1840, p. 373.

Ueber den Einfluss der verschiedenen Gewerbe auf den Gesundheitszustand und die Mortalität der Künstler und Handwerker in den Blüthenjahren, &c. Von Dr. C. H. Fuchs.

A Statistical Memoir on the Influence of Various Professions on the Health and Mortality of Mechanics and Artisans in the Prime of Life; founded on the Tables of the Institution for Sick Mechanics in Würtzburg from 1786 to 1834. By Dr. C. H. Fuchs, Professor of Medicine in Würtzburg. Berlin, 1835. 8vo.

[2] Hennen's Medical Topography of the Mediterranean. We have not been fortunate enough to meet with all these data in any other work, foreign or English. This article was written before the appearance of the army medical reports.

Professions.	Mean age.	In 1000 living, the annual			Deaths in 1000 cases of sickness.
		Cases of disease.	Number constantly sick.	Deaths.	
Soldiers, &c. (in Corfu.)	Nearly 26	1190	52·34	27·4	23·05
Artisans, &c. (in Würtz-burg.)	15-35	228·2		7·6	32·70

The ages of neither class were certainly known; and this table only shows the attacks of sickness and deaths at the ages specified; the attacks of sickness are however probably the same at all ages between 10-70. A material defect in the German professor's researches, it will be perceived, is the omission of the average proportion of sickness; investigated in the friendly societies of Great Britain by Dr. Price and the Highland Society, a defect which the data already before him will probably supply. It is almost unnecessary to remark, that the excessive mortality and sickness of the soldiers is in part owing to the climate and fevers of the Mediterranean. The mortality and sickness of soldiers in times of peace is in their native climate greatly above the average; of the English infantry eighteen in a thousand die annually, while the mortality of the entire population is only ten in a thousand at the corresponding age. The mortality of the Würtzburg artisans is apparently low; Dr. Fuchs states that the ages of the different classes were nearly the same, on an average between 15 and 35 years, and this may be fairly brought within the narrower mean of 20-30; at which period of life the mortality in Carlisle was 7·54 per 1000, differing to a trifling extent from 7·60. With Dr. Fuchs we are disposed to place considerable reliance on this general result, although the body of artisans in the society were to a certain extent selected; and we subjoin for comparison the deaths in 1000 at the same age in England and Wales, in Belgium, and in Sweden;

England and Wales.	Belgium.	Sweden.	Wurtzburg.	Carlisle.
10·1	9·1	8·9	7·6	7·5

The proportion of 32·7 deaths in 10,000 cases treated, the professor thinks highly favourable; but on what grounds we do not know. Nearly the same mortality (33·4) has been observed among the sick of the British troops in Bengal;[1] and in Corfu, only 230 died in 10,000 treated. At the same time the attacks of sickness suffered by 1000 persons in Würtzburg, Corfu, and Bengal, were in the proportion of 228, 1190, 1713.

The mean mortality of the Würtzburg artisans, expressed in parts of 10,00, being 76; the mean frequency of sickness 2282; when the same operation has been repeated for each profession, on a sufficient number of individuals, their relative *mortality*, and what Professor Fuchs has called their *morbility*, may be determined by comparison with the mean standard.

Before examining the professions separately, it is necessary to observe that: 1. The institution, and consequently the calculations, only embrace the incorporated trades; day labourers, hackney coachmen, and some others, are consequently excluded. 2. That only journeymen and apprentices belong to the institution. And this is so far for the advantage of the calculation, as the sick are nearly of the same age (15-35); besides, for obvious reasons, a profession exercises its baneful influence far more intensely on journeymen and apprentices than on their masters, who often only superintend without working at their business, and so avoid its discomforts and dangers. 3. Formerly several trades, for example, watchmakers and gunsmiths, carpenters and slaters, &c., formed one united company, and were placed together in the accounts. Professor Fuchs had no means of separating these associated trades, and was himself compelled to combine several of the smaller allied trades, in order to obtain more probable results. 4. Members having syphilitic diseases, and, up to the year 1828, also itch, were not entered on the books.

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[1] Burke on the Mortality of Troops in India, 1826–32. Edinb. Journal, No. 109.

The second and third columns of the following tables, showing the total deaths and diseases of each profession, were calculated from the payments made in the 49 years; but the contributors belonging to each profession were only known from 1818 to 1834; and the numbers in the tables were obtained by first ascertaining the relation of the sick to the contributors during these seventeen years, and calculating from the relation so obtained the number of contributors in the earlier period. For example, of 920 weavers who contributed between 1818 and 1834, exactly 269 had an attack of sickness; and, as during the 49 years 480 of the weavers fell ill, the following proportion gives the total number of weavers who had contributed, 269 : 920 : : 480 : 1642; which last sum is entered in the first column of the table.

We purposely withhold the arrangement of these 54 trades in the elaborate table of Professor Fuchs, according to their greater or less mortality and morbility, and all the professor's reasonings on their relative salubrity. Professor Fuchs is apparently ignorant or forgetful of the well-established physiological fact, that the fluctuations of mortality between 15 and 35 are limited to nearly 7-20 in 1000 of those who remain in their native climate, or he would not reason seriously with the great anomalies of the fifth column before his eyes. These anomalies are principally due to the paucity of observations, which may be sufficiently augmented if proper returns were obtained from all similar institutions; on this account the paper before us deserves attention. It is one of the numerous series of observations which we hope to collect in this Journal, from which our readers, or perhaps ourselves at some future time, may deduce rational, well-founded generalisations. It may, however, be observed, that in this arrangement, and in that which follows, those classes in which the morbility exceeds 2282, the mortality 76, are considered unhealthy; on the contrary, those professions are considered salubrious in which the proportions fall below the average.

The influence of a profession on health is the result of several appreciable agents, to determine the exact value of which is the next step in the inquiry. For this purpose Dr. Fuchs has grouped all the professions in the table according to the locality in which they are carried on; the temperature and moisture connected with their exercise; the materials employed; the muscular force required; the position and necessary movements of the body; the aliment insured to their followers; the amount of wages; their influence on the education and the state of mind of their members. This has the further advantage of increasing the number of facts in each category, and diminishing the chance of error from differences of age. The first column shows the extent of the observations or the number of yearly contributors in the group; the second the attacks of sickness in 10,000 persons living one year; the third the annual deaths in 10,000; and the fourth the deaths in 10,000 cases treated. It is right to observe that the morbility is diminished disproportionably in some professions, where the contributors were well off, and resorted less frequently than others to the institution; all the deaths were recorded. To catch the eye more readily, an * has been affixed where the mortality and morbility were above, a † where they were below the average; the * therefore indicates unhealthy professions when over the column of morbility and mortality.

INFLUENCE OF LOCALITY.	Total contributors.	Morbility.	Mortality.	Relative Mortality.
Professions carried on (1) *in the Open Air.* Thatchers, fishermen, sailors, gardeners, masons, stonecutters, plasterers, carpenters, and slaters. [The increased mortality is probably owing to accidents.]	5622	†2138	*99	465
(2) *Alternately in the Open Air and Indoors.* Coopers, surgeons, hairdressers, glaziers, farriers, chimney-sweepers, butchers, millers, tanners, grinders, ropemakers, waxchandlers, wheelwrights.	11700	†2212	†59	266
(3) *in Confined Rooms.* The 34 remaining professions.	40793	*2341	*78	338
(4) *partly in Water.* Fishermen, sailors, millers, tanners.	3569	*2536	†70	276
INFLUENCE OF TEMPERATURE AND MOISTURE.				
Professions carried on (1) *in Warm, Dry Air.* Blacksmiths, coppersmiths, locksmiths, nailers, goldsmiths, beltmakers, chimney-sweepers, swordmakers, tinmen, artillery-smiths, pewterers.	660	*2892	†66	228
(2) *in Warm, Moist Air.* Bakers, brewers, confectioners, potters, soapboilers, gilders, lackerers, waxchandlers.	6877	†1913	†52	273
(3) *in Cold, Moist Air.* Printers, dyers, grinders, plasterers, weavers, and the professions carried on in water.	8405	†2165	†83	384
(4) *in Common Air.* The 27 remaining professions.	36183	†2268	*81	359
(5) *in an Elevated Temperatature.*		*2393	†59	247
(6) *in Moist Air.*		†2051	†69	338
(7) *in Rapid Alternations of Heat and Cold.* Blacksmiths, barbers, hairdressers, chimneysweepers, brewers, millers, fishermen, and tanners.	7093	*2482	86	346
INFLUENCE OF THE MATERIALS EMPLOYED.				
Professions carried on (1) *in a Dusty Atmosphere.*	18602	†2267	†62	275
(2) *in an Atmosphere of Mineral Particles.* Stonecutters, masons, plasterers, locksmiths, blacksmiths, artillery-smiths.	7827	*2762	*77	311

	Total contributors.	Morbility.	Mortality.	Relative Mortality.
(3) *in an Atmosphere of Vegetable Particles.* Bakers, millers, hairdressers, chimney-sweepers, ropemakers.	8174	†2160	†59	278
(4) *in an Atmosphere of Animal Particles.* Saddlers, furriers, tapesterers, brushmakers, clothbearers, hatters.	2256	†1878	†23	125
(5) *in Smoke and Carbonaceous Vapours.* Blacksmiths, locksmiths, nailers, swordmakers, tinmen, artillery-smiths, pewterers, coppersmiths.	5342	*3167	†71	224
(6) *in Emanations of Mercury, Lead, and Arsenic.*[1] Pewterers, coppersmiths, tinmen, goldsmiths, beltmakers, hatters, potters, plasterers.	4732	1525	58	388
(7) *in Metallic Emanations generally.*		2430	63	263
(8) *in Vegetable Emanations.* Bakers, coopers, brewers, dyers, lackerers, weavers.	9542	2202	61	276
(9) *in Animal Exhalations.* Butchers, tanners, soapboilers, waxchandlers.	3768	1759	32	181
INFLUENCES OF MUSCULAR EXERTION.				
Professions requiring (1) *great Muscular Efforts.* Brewers, coopers, thatchers, sailors, blacksmiths, masons, stonecutters, butchers, millers, nailers, wheelwrights, carpenters, slaters.	13383	†2133	†67	317
Professions in which (2) *but Moderate Exertion is required,* Glovers, lacemakers, bookbinders, brushmakers, surgeons, confectioners, dyers, hairdressers, goldsmiths, shopkeepers, farriers, tailors, shoemakers, tapesterers, watchmakers, gilders, pewterers.	18926	*2371	*104	439
(3) *Slight but continued Activity is required.* The 36 remaining professions.	26316	†2211	†58	264
INFLUENCES OF CERTAIN DETERMINED POSITIONS AND MOVEMENTS.				
Professions in which the Men (1) *are almost always Sitting.* Glovers, lacemakers, brushmakers, goldsmiths, beltmakers, furriers, saddlers, tailors, shoemakers, tinmen, weavers, watchmakers.	18829	*2577	*99	385

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[1] The greater part of these trades are conducted on a very small scale at Würtzburg; and many precautions are taken against the deleterious influence of metallic vapours.

	Total contributors.	Morbility.	Mortality.	Relative Mortality.
(2) *generally Stand at Work.* Bakers, bookbinders, dyers, glaziers, blacksmiths, turners, coppersmiths, butchers, nailers, grinders, locksmiths, joiners, swordmakers, ropemakers, plasterers, carpenters, wheelwrights, artillerysmiths.	22648	*2451	†69	281
(3) *Alternately Sit and Stand.* All the other professions.	16648	†1713	†61	357
(4) *Work in a Stooping Position,* *Sitting*,—glovers, brushmakers, goldsmiths, tailors, shoemakers, watchmakers. *Standing*,—glaziers, grinders, locksmiths, joiners, wheelwrights, gilders, pewterers, coopers, gardeners, tanners.	24943	*2858	*95	336
(5) *Carry Burdens.*		†1939	†69	355
(6) *Climb, go up and down Stairs.*		†2100	†74	355
(7) *Use the Axe or Hammer,*		†2211	*81	368
(8) *Work with the Four Extremities.*		†2220	†71	318
INFLUENCE OF ALIMENTS.				
Professions which Prepare (1) *Articles of Food.* Bakers, butchers, gardeners, confectioners.	6983	†1732	†38	223
(2) *Drinks.* Brewers, coopers.		*2378	†63	266
INFLUENCE OF WAGES.				
Professions (1) *paid well in Summer, badly in Winter.* Thatchers, fishermen, gardeners, masons, plasterers, carpenters.		†2138	*99	465
(2) *which obtain High Wages.* Brewers, lacemakers, printers, glaziers, goldsmiths, beltmakers, shopkeepers, tanners, swordmakers, ropemakers, tapesterers, watch and gunmakers, gilders.	9886	†1634	†59	365
(3) *which gain Low Wages.* Glovers, brushmakers, barbers, hairdressers, potters, blacksmiths, butchers, nailers, grinders, tailors, shoemakers, weavers, coopers, (weisskuffner.)	19858	*2714	*103	380
(4) *which gain Moderate Wages.* The remaining 21 professions.	22759	†2223	†59	247
INFLUENCE OF EDUCATION AND STATE OF MIND.				
Professions of which the Common Members (1) *receive a Tolerable Education.* Shopkeepers, printers, goldsmiths, sculptors, watchmakers, &c.	4928	†1118	†73	653
(2) *can scarcely hope to become Masters.* Brewers, printers, millers, masons, carpenters.	9360	†1929	*86	448
(3) *are subject to Reverse of Fortune.*				

Under this last head are to be classed those professions which depend for their existence on commerce, or in small German towns, such as Würtzburg, principally on fashion. "The most striking example," says Dr. Fuchs, "of the influence exercised by fashion on the health of a profession, is furnished by the hairdressers of Würtzburg. The twenty-two masters who, with numerous journeymen, in 1803 dressed the hair and the wigs of the inhabitants of Würtzburg, have declined to eight, who together keep but five men, and the profession which Adelmann esteemed healthy and ever cheerful, has lost its high spirits, and occupies, by its great mortality (196), one of the lowest places among the unhealthy professions. I am much inclined to ascribe the unfavourable state of health experienced by the hairdressers in great part to the mental impression which the decline of that noble art has exercised on its disciples."

In stating that the increased mortality of the hairdressers was, in our opinion, *chiefly* owing to the greater proportion of *old men*—to a necessary difference of age, such as is found in all declining professions—we do not wish to cast a doubt on the great sensibility of those distinguished artists who have so long decorated the heads of the inhabitants of Würtzburg. No doubt the sudden fluctuations of wages and employment in the manufacturing towns of this kingdom have a most powerful effect on the health and mortality of the operatives.

To sum up the results of this investigation, in reply to the question, "What influence have professions on the morbility and mortality, independently of the form of malady; what professions are healthy, what unhealthy, and why are they so?" Dr. Fuchs lays down these inferences:—

1. The influence of professions on the morbility and mortality in general is remarkable; the differences in these respects between particular professions are great.

2. The mortality and morbility do not always proceed in the same ratio. Many professions have great numbers sick and few deaths—and the reverse: only eight professions (see table) are equally distinguished by a high morbility and relative mortality; and sixteen others have few sick and proportionally few deaths.

3. According to the absolute *mortality*—according to the loss which a given number of individuals belonging to the same profession suffer in a year—twenty-two professions are unhealthy, thirty-four are healthy.

4. Some agencies regulate the frequency of sickness (morbility), others the fatality of diseases (relative mortality); and hence it is clear that in particular professions the number of sick, while in others the number of deaths, will be high, without the one invariably answering to the other.

5. The absolute mortality, on the contrary, is only influenced by causes which either uniformly raise or lower the morbility and relative mortality, or exercise a *preponderating influence* on one of them; and is, therefore, although its oscillations are generally of a more limited extent, the surest measure of the salubrity of professions.

The results of the present investigations appear then to indicate, that the following circumstances connected with professions augment the mortality: slight muscular exercise, bad wages, constant sitting, the bent posture, exposure to changes of temperature, low spirits, cold, moist air, cold dry air, working in-doors, mineral dust. They confirm the conclusions of Dr. Lombard with regard to the unfavourable influence of penury and misery on health, one of the best established principles in statistics. A sedentary life is shown by each series of observations to be injurious. That education promotes health is, on the contrary, established by both. With regard to the influence of dusts and vapours, the results differ; in fact, neither possessed the means of deciding this question.

This memoir displays great industry, accuracy, and considerable acquaintance with statistics; in many respects it merits more attention than any thing that has yet been written on the hygiène of professions. One capital fact it establishes, that in favourable circumstances one man in four, or 22·8 per cent. has an attack of sickness annually; or, more precisely, 23 per cent. apply to friendly societies on the ground of sickness. Similar and more comprehensive researches we hope soon to see instituted in every part of Great Britain where there are benefit and health assurance societies.

BIBLIOGRAPHICAL NOTICES.

Tweedie's System of Practical Medicine, Vol. 2. Diseases of the Nervous System.[1]

The favourable opinion, which we expressed of the first volume of this work, may with propriety be transferred to the present. It offers, too, an additional attraction in having the notes and additions—the "American notes and additions," they are termed on the title-page—of a scientific observer on this side of the Atlantic. The pathology of the nervous system, hydrocephalus, apoplexy, delirium tremens, cephalagia, epilepsy, catalepsy, and allied affections, spinal irritation, spinal meningitis, inflammation of the spinal cord, hydrorachis, spinal apoplexy, tetanus, hydrophobia, paralysis, barbiers and inflammation of the ear, are from the pen of Dr. Bennett; inflammation of the brain, from that of Dr. Hope; insanity, from that of Dr. Prichard; chorea, hysteria, neuralgia, from that of Dr. T. Thomson; and inflammation of the eye and amaurosis from that of Dr. Taylor.

The chief notes by Dr. Gerhard are on delirium tremens and hydrocephalus; but numerous other pertinent comments are distributed through the work. On the treatment of the first-mentioned disease there is between Dr. Gerhard and ourselves a known difference of sentiment,—Dr. Gerhard believing that the alcoholic method is decidedly to be preferred, whilst we think it is very rarely necessary, or, in other words, that if a proper classification be adopted, there are but few cases which can require its employment. We are not prepared to say that the recuperative powers are in all cases sufficient to restore the individual without the employment of the wonted stimulus, but we believe the case in which it is indispensable to recovery is not often met with. In all our public and private practice, we have endeavoured to diminish as far as practicable the employment of alcohol in the treatment of delirium tremens, not because the individual cannot be brought back by it to the state in which he was prior to the attack, in the generality of instances, but because the moral effect must necessarily be—to hold out to the drunkard that the continuance of this deplorable habit is necessary to his health, and the main reliance when he becomes diseased. Were alcohol *proved* to be indispensable, we should adopt the practice universally, but we should adopt it with regret. We do not, however, consider that the numerical results adduced by Dr. Gerhard constitute this proof; not even those which he cites as having been observed in the men's wards under his care in the Philadelphia Hospital, from October 12, 1839, to October 12, 1840. Of 162 cases of decided delirium tremens, 87 were admitted in the first stage, 73 in the second, and 2 in the third; 160 cases recovered, and one remained convalescent, who is since well. "One only proved fatal; the patient was admitted in the third stage of the disease, and died in a few hours after his entrance; he had been treated with opium, and a box of pills, which he was taking, was sent to the hospital with him." "Of course," adds Dr. Gerhard, "this apparent exception confirms the general conclusion, that the disease terminates favourably in every instance when treated according to the method recommended."

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[1] Dissertations on Nervous Diseases, by James Hope, M. D. F. R. S., Physician to St. George's Hospital, &c.; J. C. Prichard, M. D., F. R. S., M. R. I. A., Corresponding Member of the National Institute of France, Senior Physician to the Bristol Infirmary, &c.; John Hughes Bennet, M. D.; Robert H. Taylor, M. D., Liverpool; and Theophilus Thomson, M. D., Physician to the Northern Dispensary, &c. Edited by Alexander Tweedie, M. D., F. R. S., Fellow of the Royal College of Physicians, Physician to the London Fever Hospital, and to the Foundling Hospital, &c; with American Notes and Additions, by W. W. Gerhard, M. D., Lecturer on Medicine, Physician to the Philadelphia Hospital, Blockley, &c. 8vo, pp. 551. Philadelphia, 1840.

Dr. Gerhard will, we are satisfied, appreciate the force of the remark, that any inference from a single year's observation may be fallacious; especially when a similar system of treatment had been adopted, by him and by others, in former years, and with less favourable results. It is a well known fact, that in certain seasons and years diseases are more severe than they are in others; and we think the circumstance, that, of the 162 cases of delirium tremens referred to by Dr. Gerhard as having been admitted in the year ending October, 1840, only *two* are classed in the third stage, sufficiently exhibits that the disease was unusually mild. We have before us a summary of the cases treated in the men's and women's Lunatic Asylum, Blockley, from January 1st, 1839, to January 1st, 1840, politely furnished us by an estimable colleague, and published in the number of the "Intelligencer" for June 1, 1840. According to this summary, it would appear that the number of cases admitted into both asylums during the past year was as follows:

Delirium tremens.	Men's.	Women's.
First stage,	91	40
Second do.	78	12
Third do.	31	15

Of those in the third stage on the men's side 6 are reported to have died; of those on the women's side 2. In the first and second stage none died.

We cannot, consequently, consider that Dr. Gerhard has "settled the value" of the treatment "upon a more definite basis than has yet been done." We should desire to see him continue his investigations through a succession of years; to compare, as extensively, and under circumstances as nearly identical as possible, different methods of treatment, and to communicate hereafter the results of his additional experience.

Dublin Dissector.[1]

This is not truly the first American edition of the Dublin Dissector; although the first "from the fifth enlarged Dublin edition." The value of the work is well known, and its utility has been increased by the additions of the American editor. We need scarcely add, that it is one of the best, if not the very best, companions to the practical anatomist.

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[1] The Dublin Dissector, a Manual of Anatomy; comprising a Description of the Bones, Muscles, Vessels, Nerves, and Viscera; also the Comparative Anatomy of the Different Regions of the Human Body; together with the Elements of Pathology. By Robert Harrison, A. M., M. B., T. C D., &c. &c. First American, from the fifth enlarged Dublin edition; with Additions by Robert Watts, Jr., M. D., Professor of Anatomy in the College of Physicians and Surgeons in the city of New York, &c. &c. 12mo, pp. 541.

We recommend the work most conscientiously to the attention of every reader.

Lee on a Filaria in a Horse's Eye.[1]

This is an account of the Filaria which we had an opportunity of seeing in the eye of the horse, and which was described in a former number of the "Intelligencer." Dr. Lee, with us, regards it as the Filaria papillosa. The following are his views as to the mode of origin:

> "Ehrenberg has clearly proved by his careful microscopical observations, that these animals have organs of reproduction clearly developed, and never deficient; indeed, surpassing in development, for the most part, those of other organic systems; thus plainly pointing to a predominant cyclical development, in the same manner as we find in the higher organisms. Ehrenberg has also shown that the fecundity of these animals is most astonishing, each female producing thousands, if not millions, of ova at a time. The same diligent and accurate observer states, that if we carefully examine animal bodies, whether of man or other animals, we shall, in nearly all cases, discover worms of some kind, and that we do not meet with more, he thinks is owing to the great difficulties in the way of the development of the ova, among which the resistance of the vital principle is not the least. He therefore believes that the eggs of intestinal worms are taken into the circulation and carried into all parts of the body, but are developed only where the particular conditions requisite for this purpose are favourable. 'The smaller diameter of the finest vessels through which they have to pass,' he remarks, 'does not appear to me to present any important difficulty, because these, as we see in every inflammation, become easily and quickly expanded as soon as they are irritated; and these eggs may, as excretive bodies, like every body which is foreign to our organism, act in an irritative manner, and may be taken up by the embouchures of the absorbents, and be propelled along with increased activity through them; that this is the case with mercury, pus, and other matters, has been already received as an observed fact. It is even probable that the eggs of the *Entozoa* and their propulsion through the vascular system may be an important morbid matter hitherto overlooked, and which causes a part of the phenomena comprehended under the name scrofula. In bodies which are particularly favourable to the development of worms, there must necessarily be an innumerable quantity of secreted eggs of these parasites, which, if they are not expelled by the intestinal canal, or by the *primæ viæ*, must, as foreign bodies, produce disorders. If the absorption takes place entirely or for the most part in the lymphatics, it would occasion their general or sole influence upon that system. Obstructions in the lymphatics, but especially in their reticular tissue, the glands, which lead to local congestions of lymph, inflammations, and morbid appearances of various kinds, become in this manner very easy of comprehension; and these assuredly deserve the attention of medical science, not as speculations, but as realities. Thousands of eggs of intestinal worms, whose existence in many bodies cannot be denied, must perish, as they are rarely developed in such great quantities, from the difficulty of their attaining the place and conditions favourable for their development; while only some, very often none, ever actually attain those conditions. This relative proportion of the number of intestinal worms and of their eggs to the organs of the

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[1] An Account of a Filaria in a Horse's Eye, with Remarks on Similar Phenomena, and the mode of their Origin. By Charles A. Lee, M. D., of New York. 8vo, pp. 19, From the Amer. Jour. of Science and Arts, No. 2, Vol. 39.

larger animals, is also found to exist. There are very often observed in animal dissections a small number of full-grown worms, filled with an innumerable quantity of eggs, without any young in their proximity; and I was often astonished to find in the considerable number of my dissections of animal bodies, (I have brought from Africa alone intestinal worms of 196 species of animals, all of which I have myself dissected, and of some from 40 to 50 individuals,) only a few alive, although these were completely filled with eggs. Thus from laborious observations this opinion has become more and more firmly fixed in my mind, that it is much more astonishing how the great fecundity of the Entozoa should be so limited by the living organs, than that it should be possible that living worms should inhabit them, and, considering their diffusion, escape observations which are generally superficial.'

"Such are the views of this very able naturalist on this difficult subject, and I believe they are those which eventually will be generally adopted. In this manner can we only satisfactorily account for the existence of worms in the fœtus of man and other animals, and in the intestines of chickens and the young of other birds, which have just broken the shell; numerous instances of which have been recorded by Rudolphi, Blumenbach, and others. I see no great difficulty in the supposition that these ova are absorbed by the lacteals and lymphatics, and carried into the circulation, as they are known to be smaller than the particles of quicksilver, and the colouring matter of madder, &c., which it is well known are constantly taken up and deposited in the bones and other tissues of the body. We believe, then, that it is in the highest degree probable, if not actually proved, that the minute ova are thus introduced into the blood, carried to every part, and *there* only hatched when they meet with a suitable *nidus* or *pabulum*, and other circumstances are favourable to their development.[1] Thus are they transmitted from parent to offspring, and thus do we account for the fact that each species of animal has its own parasites. In this manner the ovum of the *Filaria* was deposited in the eye of the horse now exhibiting in this city, there hatched into existence, and where it may now be seen, reveling in an element which appears, so far as we can judge, to be highly congenial to its nature and habits."

MISCELLANEOUS NOTICES.

Vermont Academy of Medicine.[2]—From the Circular, with which we are favoured by Professor Bryan, we find that the following gentlemen compose the faculty:—Horace Green, M. D., Professor of Theory and Practice of Medicine; Robert Nelson, M. D., Professor of General and Special Anatomy and Physiology; James Hadley, M. D., Professor of Chemistry and Pharmacy; James Bryan, M. D., Professor of Surgery and Medical Jurisprudence; Joseph Perkins, M. D., Professor of Materia Medica and Obstetrics; C. L. Mitchell, M. D., Professor of General Pathology; and Egbert Jamieson, M. D., Demonstrator of Anatomy.

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[1] "A very curious disease of the eye has in a few instances been observed. The common symptoms of ophthalmia appear,—as injection of the conjunctiva, dimness of the cornea, weeping and swelling of the cornea. These are properly attended to, but the inflammation increases; and on very close examination, *a small white worm*, about the size of a hair, and an inch in length, is found swimming in the aqueous humour, or that fluid which is immediately behind the cornea. Now it is at once evident that the only way to get rid of or to destroy this worm, is to puncture the cornea and let it out; and this method has been resorted to. In some cases, however, not many days pass before another worm makes its appearance, and the operation is to be performed a second time, and the horse eventually loses that eye. A veterinary surgeon, M. Chaigraud, who seems to have had most experience about this, says that three or four days before the appearance of the worms, *one or two minute bodies, of a reddish white colour, are seen at the bottom of the anterior chamber of the eye.* He also says that the disease appears about June, and is not seen after December. There is no difficulty about these animalcules getting into the eye, for there are undisputed instances of their passing through the smallest capillaries, and being found in almost every tissue."—*Youatt on Cattle*, p. 293.

[2] Annual Circular of the Vermont Academy of Medicine, for the Session of March, 1841. Castleton, Vermont, October, 1840. 12mo, pp. 12.

Yale College, Medical Department.—From the Annual Catalogue of Yale College, with which Professor Hooker has favoured us, we discover that the number of medical students during the last session was 52.

On Paullinia, a New Medicinal Substance. By Dr. Gavrelle.[1]—Paullinia is an extract from a plant of the same name, originally from Brazil, which extract is prepared by the Indians, and appears to possess a very energetic stimulating action. M. Gavrelle has presented a specimen to the Society of Medicine, together with a new alkali, which two chemists of Paris had separated by analysis. The extract and alkali are very bitter, and exhibit great analogy with caffein.

It is probable that paullinia, or the extract which bears this name, is extracted from several plants of the genus Paullinia, which contains thirty-one species, and is of the natural family Sapindaceæ; and Octandria, Triginia, in the artificial arrangement.

This genus has received its name from being dedicated to Simon Paulli, a physician and botanist, who was born at Rostook in 1603, and died at Copenhagen in 1780. This physician was the author of several works, and more notably of *Quadripartitum de Simplicium Medicamentorum Facultatibus*, 1668, in 4to; a work upon the abuse of tea, tobacco, &c.

Paullinia Africana is employed in Senegambia to arrest hemorrhage, by the application of the powdered bark to the wounded parts. The bark of the *P. Asiatica* is used at Bourbon as a febrifuge; in India the bark, the leaves, and the fruit are employed as a decoction, prepared with four grammes of these substances, as a remedy for venereal complaints, rheumatism, gout, and cutaneous affections.

The seeds of *P. eupana* are used by the Indians of Oronoko; they mix them with cassava and water, and leave them in contact. When the liquid mixture begins to putrefy, which is denoted by becoming of a yellow colour, and acquiring a bitter taste, they draw off the clear portion and mix it with the water which serves for their common drink.

P. Mexicana possesses, according to Hernandez, the properties of sarsaparilla.

The seeds of *P. pinnata* are stupifying; they answer in Brazil and the Antilles to poison fish. The leaves of paullinia are, according to Pitron, vulnerary. The *P. serjania* also furnish seeds, which produce drunkenness.

Finally, according to Martins, an extract is prepared from the *P. sorbilis*, known in Brazil under the name of *guarana*, which is a medicine composed by the Indians of Para, and is made up by them in the form of lozenges, weighing 125 to 250 grammes.

The colour of the guarana is brown, and in the mass is composed of lumps which are less coloured interiorly than on the surface. This product is hard, very light, inodorous, and of a slightly bitter taste, without any sensible astringency. Gomez states that the guarana is efficaciously used in Brazil for dysentery, and for diseases of the urinary passes produced by relaxation, four to six grammes being taken in a glass of water; according to M. Batka, the guarana contains a vegetable alkali called guaranine.

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[1] From American Journal of Pharmacy, October, 1840, p. 206.

M. Gavrelle gives the following details on the paullinia, which he has frequently used; he states that it is the product of the *P. sorbilis*, family *Sapindaceæ*, of which the fruit bears great resemblance in colour to the cocoa, its odour is *sui generis*, its taste bitter, analogous to that of rhatany.

It is prepared by separating the seeds from the capsules, exposing them to the sun, until the integuments will separate by simple pressure; they are then reduced to a fine powder.

M. de Chastetus has found in them gum, amidon, a brownish red resinous matter, and a crystallisable matter, which possesses the chemical properties of caffein.

In Brazil and the neighbouring countries it is given as a drink, mixed with cocoa, for dysentery, and as a tonic. Since it has been brought to France, M. Gavrelle has employed it with success in chlorosis, tedious convalescence, paralysis, the looseness of phthisis, headache, &c., by which it may be seen that its use is similar to that of *guarana*.

Mode of Administration.

From numerous experiments carefully made, we are led to the conclusion that the extract made with diluted alcohol is the preparation which would most exactly represent the properties of the plant.

1. *Lozenges of Paullinia.*

Hydro-alcoholic extract,	21 gram. 3 dec.
Sugar, scented with vanilla,	560 „

Make into lozenges, each containing 6 decigrammes.

2. *Syrup.*

Hydro-alcoholic extract,	10 gram.
Syrup,	1000 „

Fourteen grammes may be given in a day.

3. *Pills.*

Hydro-alcoholic extract, q. s.

To be made into pills containing each a decigramme, with a sufficient quantity of powdered liquorice.

On the Operation for Strabismus. Claims of M. Jules Guerin. By M. Jules Guerin.[1]—In a letter on the treatment of strabismus, addressed to the Academy of Sciences, 29th June, 1840, M. Guerin says: "I have the honour to inform the Academy, that I have four times practised with success the division of the muscles of the eye, in cases of convergent strabismus. I shall briefly state the principles which have directed me in this operation. I had long and publicly professed that strabismus was the result of the contraction of the muscles of the eye; and the varieties of this deformity the necessary consequence of different degrees of contraction. It is in fact an application of my general theory of articular deformities in the skeleton, and caused one of the most eminent members of the academy to designate strabismus as *club-foot of the eye*."

M. Guerin goes on to state, that in his clinical lectures he frequently proposed to extend division of the muscles to deviations of the eye, in the same manner that he had applied it to deformities of similar origin, and that eighteen months since he offered to cure Dr. Pinel Grandchamp of strabismus by means of this operation. He proceeds: "As for the operation itself, it differs in some respects from that of M. Dieffenbach. One of the reasons which induced me to pause before attempting his method, was the fear of inflammation occurring in a wound exposed to the air upon a delicate organ, and so near the cerebrum. These accidents I feel certain of avoiding by the following method:

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[1] L'Expérience, Juillet 9, 1840; and Br. and For. Med. Rev., Oct. 1840, p. 572.

"In place of dividing layer after layer, I detach the portion of ocular conjunctiva which covers the muscles from the sclerotic, and raise it with broad-nibbed forceps until the muscle is exposed. This being divided with curved scissors, I restore the detached portion of conjunctiva to its place; this, by closing the wound, prevents the access of air, and obtains all the advantages of a subcutaneous wound. Experience has confirmed my preconceived notions of the theory; in the four operations I have performed, there has been no sign of suppurative inflammation.

"The result of these operations has been very satisfactory; but not so immediately advantageous as M. Dieffenbach observed. In one instance there was a complete and instantaneous restoration of the natural position of the eye, in the others only an amelioration. This circumstance appears to be a natural consequence of the true origin of strabismus. At one time the deviation of sight is originally muscular, and the result of spasmodic contraction in a single muscle; at another time the contraction is consecutive or even primitive; but it has simultaneously affected many muscles.."

On the Cure of Strabismus. By Dr. F. A. von Ammon.[1]—[In the great number of the papers written on this subject, it is scarcely to be expected that more than two or three remarks on each should be worth abstracting. In the present article, by the editor of the Monatsschrift, the following passages are worthy the attention of our readers]:

A principal point is the determination of the indications for the operation; and I think it the more important, because the whole history of the affection, notwithstanding the works of many excellent physiologists, is extremely obscure and uncertain. Nor could this be otherwise, when the abnormal position of the eye is in different cases so varied, and so often the consequence of diseased conditions of the brain, the abdominal nervous system, and of the globe itself. Here is a wide range for the production of the disease, independently of the cases which are produced by diseases of the orbit. No rational physician will expect to cure such a strabismus by myotomy; and the operation can be applicable only when the malposition of the eye is primarily dependent on the muscle, i. e. when there is a shortening of one of the muscles of the eye, which holds the eye to one side and limits its motions towards the other; but even here more than one condition must be laid down.

But unfortunately the necessary basis of the operation, pathological investigation, is at present absolutely and entirely deficient; no one has yet clearly convinced himself on the dead body that a shortened state of the muscle exists in squinting. The operation, however, may itself be made the means of investigating the nature of the disease; and here again, as has been the case with club-foot and wry-neck, surgery may be made the assistant of pathology.

With regard to the true orthopædics of the eye, i. e. its acquiring the right position after the operation, this consists in the constant endeavour and active exertion of the patient to give his eye the proper direction. A club-foot or a wry-neck would just as soon return to its right position after division of the tendons without assistance as a squinting eye will. A good method of insuring success is to tie up the sound eye; the eye that has been operated on then always moves to the centre of the orbit, and the longer it is kept there the more likely it is to remain. In few cases will this or some similar measure be unnecessary.

The author also suggests the propriety of endeavouring to make a subcutaneous, or rather a subconjunctival division of the muscle, which he believes would avoid all the inconveniences to which the present method is subject. He has performed it on the dead subject and on animals, and has no doubt it may be applied to actual cases of strabismus.

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[1] Monatsschrift für Medicin, &c., June, 1840; and Br. and For. Med. Rev., Oct. 1840, p. 373.

THE

AMERICAN MEDICAL INTELLIGENCER.

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Art. I.—MEDICO-CHIRURGICAL TRANSACTIONS.[1]

[We adopt the following abstract of the valuable papers contained in the last volume of the Medico-Chirurgical Transactions, from the Edinburgh Medical and Surgical Journal.—Ed.]

We have much pleasure in giving early attention to the annual call, which we are happy to see that the respectable association, whose volume is now before us, continues to make upon our services; and we shall consider the papers in the order of the subjects of which they treat, beginning with those on Practical Medicine and Surgery.

The first communication on the former series is entitled *Notices of the Effects of Lead upon the System;* by James Alderson, M. A. and M. D., Physician to the Hull General Infirmary. In two cases, which came under the author's care, of young women employed in lead-works, of the respective ages of 25 and 18, who were affected with paralysis, the one both in the upper and lower extremities, the other in the hands only, there was the singular anomaly of complete loss of vision, which followed closely on the paralytic symptoms. After the ineffectual use of ordinary remedies, the author was successful in restoring vision, by the additional measure of bandaging up the eyes, day and night, for several weeks, so as entirely to exclude light. This plan he adopted from a supposed analogy with the successful employment of splints, in cases of loss of power of the extensors of the wrist and arms.

"The action of light," he observes, "is the proper stimulus of the retina, and its continued action whilst the nervous expansion is paralysed, is precisely similar to the continued extension of the extensor muscles of the arm and hand; as in this latter case, relieving the muscles from their continued extension by means of splints has been found to restore their suspended power, so it was, by analogy, to be supposed, that by removing the stimulus of light altogether from the eye, the power of vision would probably be regained."—P. 83.

The author offers some general remarks on the treatment of the various affections arising from the poison of lead on the system; and gives the case of a family in which that poison was introduced through the internal use of rain water, lodged in a leaden cistern; which was found to have varying quantities of lead in it, according as it had been recently disturbed, or long quiescent. The water, we are informed, was always filtered before use; but in this state it was sweetish, and afforded distinct evidence of the presence of lead. By other experiments, however, it is to be inferred, that filtration will deprive water of nearly all the lead contained in it, and exhibit that substance separately in the filter.

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[1] Published by the Royal Medical and Chirurgical Society of London. Volume xxii. being the 4th volume of the 2d series. 8vo. London, 1839.

The author seems to us to underrate very much the importance of opium in *colica pictonum*, and to carry his analogical reasoning rather too far, when he attributes that severe complaint to paralysis of portions of the intestine. If the paralysis which is found to be produced in some particular muscles of the body, by the poison of lead, were always, or even occasionally, attended with severe pain in the parts affected, there might thus be some degree of support afforded to the author's reasoning, which we would submit that it does not otherwise possess.

The next medical communication contains *Notices of the Occurrences at the Small-pox Hospital, London, during the year* 1838; by George Gregory, M. D., Physician to the Small-pox Hospital. The total number of persons admitted with small-pox in some of its forms was 695, of which 187 died, or 27 per cent., which is about 1 in 3⅔ds. Of the unvaccinated there died at the rate of 40 per cent., or 1 in 2½, which is in the same ratio as the deaths from small-pox in 1781. Of the vaccinated 8 per cent. died, or 1 in 12½; and the severity of the disease increased materially with age.

Much difficulty occurred in forming a correct conclusion, both in respect to such as had been or had not been previously vaccinated. In the former cases, the cicatrix was the chief guide; but it was not always a sure one; while the highly modified character of the disease in many of the latter afforded strong presumption of occasional prior vaccination. The principal results are given in a tabular form.

The next communication gives *a Statistical Account of Cholera in the Seamen's Hospital in* 1832; by George Budd, M. B., F. R. S., Physician to the Seamen's Hospital. In our account of the 21st volume of the Medico-Chirurgical Transactions, we had occasion to notice some interesting histories and dissections of several cases of cholera, by the author of this communication and his colleague, Mr. Bush. In the present paper, Dr. Budd gives some general deductions in reference to the statistics of that disease, of which we shall give a general abstract.

With regard to the mortality which occurred at different periods of this epidemic, the number of admissions increased during the months of June, July, and August; and the average mortality was 93 cases in 160, which is 58⅛ per cent., or 1 death to 1.72 cases. At first, the number of deaths was double the recoveries; but towards the end of the epidemic, about half the number only. In the Echo, cholera vessel, however, such disparity did not occur.

Mortality was much influenced by age; being least in persons between the ages of 15 and 30, and greatest in those above 50. Of 13, whose ages exceeded 53, not one recovered. Liability to the complaint was least between the ages of 20 and 30, but it increased much with advancing life, just as has been found by M. Grisolle to be the case with susceptibility to the poison of lead. Deranged health he likewise found to be unfavourable to recovery; for the proportional mortality was greater in persons affected with cholera who belonged to the hospital ship, the Dreadnought, than in those who were previously healthy. Much diversity occurred in the proportional diffusion of the disease in different epidemics; and in the Donor, which was fitted up precisely as a cholera ship, not one of the medical gentlemen or nurses took the complaint; though one of the former and three of the latter lived on board, and many examinations were continually conducted there, and in very ill ventilated cabins. The author, indeed, states the very satisfactory fact, that not a single death occurred among the medical officers of the Dreadnought, or of the cholera hospitals connected with it, during the whole existence of that disease in London.

The last of the medical papers contains *Cases of Measles, occurring oftener than once in the same individuals;* by John Webster, M.D., Consulting Physician to the St. George's and St. James's Dispensary. In the first of these cases, the author attended the patient in a regular attack of measles when 2 years old, and again about two years afterwards. In the second the patient, a young lady of 15, had measles regularly under the author's care, but was reported, on evidence which he had not the smallest reason to doubt, to have had the disease twice before; the first time at Madras when four years of age, and the second at Blois six years afterwards.

Another instance of a similar kind is mentioned by the author on the authority of Dr. Forbes, of Argyle street.

The first of the surgical papers is a *Case of Malignant Disease, occupying one half of the Tongue, in which a Ligature was applied from beneath the Jaw;* by James M. Arnott, Surgeon to the Middlesex Hospital. The subject of this very creditable operation (which was suggested by one performed by M. Jules Cloquet and M. Mirault respectively, in two cases of cancer of the tongue,) was a young woman of 15, who had a tumour about the size of a pullet's egg, of a purple hue, which occupied the right half of the tongue, extending from nearly half an inch of the apex to the *isthmus faucium;* and reducing, by compression, to a narrow slip the width of the left or sound half of the organ. It began at about nine years previously, in a blue swelling, about the size of the tip of the finger, which remained stationary till the last six weeks, when it rapidly increased during the use of pills, which she took for fits with which she had been attacked, but which produced no affection of the mouth. It measured two inches and a half in length, one inch and a quarter in breadth, and one inch and a half in thickness; was covered posteriorly by warty excrescences; and when drawn forcibly to the left side, allowed the boundaries to be traced by the finger under the arch of the palate, where sound structure could be felt beyond it.

The operation was performed on the 6th of June, 1838, in the following way: "The patient being seated, the head slightly extended, and the *os hyoides* felt, an incision was made from over it upwards and forwards, an inch and a half in length in the mesial line, through the skin, cellular substance, and raphe, of the mylohyoid muscles. With the edge of the knife, but chiefly by its handle, way was made for the finger between the two *genio-hyoid* and the two *genio-glossi* muscles. A tenaculum was next passed through the apex of the tongue, by means of which it was drawn out of the mouth, and held so during the subsequent part of the operation by Mr. Mayo, (Mr. Tuson, Dr. Warren of Boston, U. S., and Mr. B. Phillips, being likewise present.) Into the wound in the neck a strong needle with an eye at the point in a fixed handle, was now conducted, and passed through the basis of the tongue into the pharynx, a little to the left of the mesial line: the loop of ligature which it carried was then, by means of a blunt hook, drawn forwards out of the mouth, and the needle withdrawn from the wound over one of the ends. The loop being cut, two ligatures were obtained; one of these was placed along the upper surface of the tongue, so as to bound the disease on its left side, and carried through the apex of the tongue from above downwards by means of a large curved needle, through which the oral end of the other ligature was now also passed. Fixed in a porte-aiguille, this needle was next carried through the floor of the mouth immediately behind the last molar tooth, on the right side, directed at first, and for the greater part of its course, perpendicularly downwards, then inclined mesial, and brought out at the incision in the neck. There were thus two ligatures, the four ends of which hung out of this wound; one of the loops was so disposed as to encircle the right half of the tongue at its basis beyond the tumour; the other was placed longitudinally on the upper surface of the tongue, longitudinally and obliquely below. Being tied, (and this was done as tightly as possible,) the diseased mass was circumscribed posteriorly, laterally, and in some measure inferiorly. A third ligature was now passed through the fore-part of the tongue, so as to isolate at this point the diseased from the healthy structure."—Pp. 23–25.

The operation was well borne; and the patient, for a fortnight, had food and medicine conveyed into the stomach solely through an elastic gum catheter, introduced into the œsophagus along the left side of the mouth. The strangulation of the diseased part not being completely effected by the ligatures, it was found necessary, on the fifth day after the operation, to endeavour to tighten them, by carrying a canula over them. The plan, however, did not answer; but on the twelfth day, the author succeeded in his object, by means of a loop of silver wire, which effected the death of the part, and produced separation on the fifth day from its employment. The process of cicatrisation went on favourably; and on the 10th of July, the patient left the hospital. There was no appearance of a recurrence of the disease after a lapse of sixteen months; and a stranger would not discover, by her speech, that she had lost so large a portion of the tongue. He would merely remark that she lisped.

The following communications follow in the surgical division:

Case of Fracture of the Coracoid Process of the Scapula, with Partial Dislocation of the Humerus forwards, and Fracture of the Acromion Process of the Scapula; by John F. South, Esq., Assistant Surgeon to St. Thomas's Hospital. The title of this paper sufficiently describes the nature of the injury, which was satisfactorily made out by examination after death. A notice is appended of a fractured coracoid process, which came under the notice of Mr. Arnott, at the Middlesex Hospital.

Case of Aneurismal Tumour in the Orbit, cured by tying the Common Carotid Artery; by George Busk, Surgeon to the Seamen's Hospital, Dreadnought. This was the case of a seaman of 20 years of age, who, by a severe blow on the head, became for some time insensible; had hemorrhage from the right ear, and deafness in that organ; swelling in the eyelids and integuments of the left eye, with fixed dilatation of its pupil; incapacity to move its globe: and slight paralysis and feeling of numbness on the left side of the face. Purulent discharge took place on the right ear, which continued some time; and soon afterwards pain in the left eye, and deposit of purulent matter between the laminæ of the cornea, which was discharged by ulceration. In about four months from his accident, he had small-pox; and on his recovery, and return from the Small-pox Hospital, (to which he had been sent,) the eye was found to be prominent, and to have a large and irritable ulcer on the cornea. The deafness continued, with *tinnitus aurium*, and the paralytic affections of the globe of the left eye and muscle of the face remained unabated.

Some improvement took place, after some weeks, in the ulceration of the cornea and general health; but a distinct pulsation was then discovered in the globe of the eye, which was found to proceed from a firm pulsating tumour, in the upper and inner part of the orbit, within the superciliary ridge. The eye was hot and uneasy, and the patient was much troubled with loud noises in the head, but no pain. Pressure on the left common carotid put a stop to the pulsation and noises; and hence the author inferred the existence of a common cause, and this most likely an aneurism of some vessels within or close upon the orbit. An operation was determined upon, and the common carotid was accordingly tied in the usual place and manner. The patient went on favourably; and in about two months was discharged cured. The ulcer of the cornea was healed, and the noise in the head ceased; but the paralysis of the eye and face continued; and the deafness was very singularly transferred from the right to the left ear.

The author is disposed to consider the affection now mentioned as arising from true aneurism, rather than aneurism by anastomosis; and he gives a similar case, which occurred to Mr. Scott at the London Hospital, in which protrusion of the right eye took place after a fall into a ship's hold. During the patient's treatment, the prominence increased, pulsation became evident; and on the accidental occurrence of profuse arterial hemorrhage from the nose, which was found to be commanded by pressure on the common carotid artery, that vessel was immediately secured. The protrusion of the globe, by this means, "directly receded in a great degree, and its prominence afterwards gradually diminished."

Statistical Notices of One Hundred and Twenty Cases of Carcinoma Uteri, with Remarks; by J. C. W. Lever, Esq. The principal deductions made by the author in respect to this formadable disease are the following: but we are not informed as to the locality in which the cases occurred. The period of life most obnoxious to *carcinoma uteri* was from the fortieth to the fiftieth year. Of the persons affected 5 per cent. only were of unmarried women, and 7 per cent. of widows (who, we presume, had early became so), while 86 per cent. were of married women: thus refuting the idea that celibacy favours the development of the complaint; 34 per cent. were married between the ages of 15 and 20; 36 per cent. between the ages of 20 and 25; 20 per cent. between the ages of 25 and 30; and 1½ per cent. only occurred between that period and 45; fractions in all cases being put aside. Ten barren women, or about 8 per cent., occurred out of 113 who were married; and an average offspring of about 5¾ each to the 103 bearing women. The abortions were 2½ each on an average among 40 who had miscarried; or near 17 per cent. of the whole of the conceptions among the 103 child-bearing women—20 per cent. of the affected were of fair, 79 of dark complexions.

Only 20 per cent. were of persons whose uterine health was good in early life. In 15 per cent. the patients suffered from amenorrhœa; in 54 per cent. from dry amenorrhœa; and in 2½ only from other uterine diseases.

Death occurred in 107 cases; the average duration of the complaint being 20¼ months; and the great majority being between the bounds of 19 and 23 months. The register of the obstetric out-patients of Guy's Hospital, we are informed by the author, exhibit the proportion of 1 in 7, or nearly 13 per cent. of cases of *carcinoma uteri* to other uterine disease.

His remedial views on the subject the author will give on some future occasion.

Remarks on the Acute Form of Anasarcous Tumour of the Scrotum; by R. Liston, Esq., Surgeon to the North London Hospital, &c. In the diffuse watery tumour of the scrotum, which is a frequent attendant on general dropsy, Mr. Pott points out the danger of unloading the cellular texture by free incisions, and advises the employment of punctures only. In a class of cases which have come under the author's notice, of rapid distention of the scrotum, with serosity, he found that the complaint was only to be arrested by early and free incisions.

"This distention is or is not attended by redness or erythema of the surface; but there is reason to think, from the suddenness of the accession, and from the appearances on exposing the cellular tissue, that there is no actual inflammation of its texture; there being no induration, nor any appearance of lymph or puriform fluid in the areolæ.

"The affection has generally supervened upon abscess or ulcer, perhaps trifling, in the perinæum or groin. Its accession has been sudden, the swelling and tension becoming very great and alarming, even within a few hours. The most dependent part, generally the posterior, will be found at a very early period to present one or more deeply-seated ash or tawny-coloured spots; these extend; the integument is speedily involved; and, unless active measures be adopted, the entire coverings and investments of the testicles will be destroyed, and these organs exposed."—Pp. 289–90.

The author gives particulars of six cases in exemplification of the practice which he recommends.

Remarkable Case of Dry Gangrene occurring in a Child three years and seven months old; by Samuel Solly, F. R. S., Lecturer on Anatomy and Physiology, and Lecturer on Comparative Anatomy at St. Thomas's Hospital. This interesting case was of a boy three years old, whose feet became of a blackish purple colour, and soon exhibited sloughs, which extended over the left foot, and produced an amputation of it in about four months.

Three months from the first attack, the upper extremities became affected, and when Mr. Solly saw the child two months afterwards, the following were the phenomena observed:

"His right fore-arm was gone, having been partially amputated by nature at the elbow-joint by the disarticulation of the radius, though the ulna had been divided lower down, opposite a point which might be seen in the detached radius, as at that place the bone was thinner, a portion of its surface having been removed by absorption, where the line of separation had first commenced. The slough had extended above the elbow-joint, where nature appeared to be making a second attempt at amputation, from the distinct though comparatively pale line of ulceration between the living and dead portions of the limb.

"The whole of the left fore-arm, and about half the upper arm, was in a state of dry gangrene; but there was a distinct line of separation in the upper arm.

"The foot of the left leg was completely removed just above the ankle-joint, between the epiphysis and the shaft of the tibia and fibula, leaving the extremities of the bone exposed, the soft parts presenting a surface healthy and granulating in one part, but sloughy in another.

"On the right foot the phalanges of the second and third toes had been removed by the same unsparing hand, the stumps having a healthy cicatrix; but on the calf and knee of the leg there were livid spots. Such was the extraordinary appearance of this poor little child the first time I saw it. The pulse in the carotids was 140, feeble, easily arrested, but distinct to the eye.

"The action of the heart more feeble than natural, but unaccompanied by any unnatural or irregular sound. The mother observed that, when every thing was quiet at night, it sounded as loud as the ticking of a watch.

"The intellects were perfect, and the child, on the whole, wonderfully quiet and tranquil, but complains much of feeling cold unless close to the fire."—Pp. 256–257.

The process of healing went on under proper support, and when Mr. Solly saw the child again, about three months after his first visit, he found that "nature, unassisted by the surgeon, had amputated the three extremities, and formed stumps which might shame many formed by the operator's knife. The stump of the right arm was as perfect as could be desired; the bone in the left projected slightly, but was in the course of removal by absorption. The stump of the left leg was nearly healed, with a very slight granulating projection opposite the bone. The child's health was much improved, his spirits good, and he was freer from pain."—P. 265.

A drawing is given of the appearances of the limbs at Mr. Solly's two visits; and he considers the progress of the disease to have been identical with what is usually observed in senile gangrene.

On the Structure, Physiology, and Pathology of the Persistent Capsular Investments and Pulp of the Tooth; by Alexander Nasmyth, M. R. C. S. In this paper, which is principally of a physiological character, the author's attention is directed to the third or eruptive stage of dentition; the two first stages, the follicular and saccular, having been sufficiently treated of by different physiologists previously.

The author is disposed to consider Cuvier in error, when he represents the cutting of a tooth as a process of disruption instead of absorption; and he was led to regard the common opinion as ill founded, where the enamel was thought to possess, after protrusion, no external covering whatever. The consideration of the existence of *crusta petrosa* on the enamel of the teeth of some animals, as a dense protecting investment, led him to doubt whether there might not be something of analogy in those cases where the enamel appeared entirely bare.

Some years ago, after subjecting the human teeth to the action of acid, he observed detached portions of membrane floating on the surface of the solution, which were found to be exceedingly delicate, easily separable, and continuous into the chamber of the tooth, with the structure covering the fang. He succeeded in tracing this as a distinct coat or capsule, from the fangs, over the whole crown of the tooth; and has given it the name of the *persistent dental capsule*. Though this membrane is soon torn by attrition, yet it is at any time capable of being readily detected in shreds after the maceration of a tooth in muriatic acid, diluted to one eighth of its original strength. It then bears the appearance of the capsule of an unobtruded tooth, being fibrous externally, and reticular internally; its earthy deposit (supposing any existed in it, which, from a subsequent passage, seems doubtful,) having been entirely removed. The author's general conclusion on the subject, therefore, is, that the enamel and body of human, and all other teeth, simple as well as compound, is covered by a distinct capsular investment, and that this is converted in some animals, as the Ruminantia, into *cementum* or *crusta petrosa*, by the deposit of earthy matter in its substance. The only writer who is known to the author as having approached to a correct knowledge of this cortical substance is Fraenkel, who, in an inaugural dissertation, published in 1835, states, that he had observed a continuation of a thickened cortical substance from the body of the tooth to the enamel, in a small portion of which a single layer could be readily removed.

The author has likewise satisfied himself of the existence of a distinct layer of substance, externally to the *crusta petrosa*, when that is considerable, which varies in thickness with the thickness of the petrous crust, and may, he thinks, be possibly a cartilage of it.

The capsular investment on the fangs of the teeth, which forms the second section of his subject, is covered with a thin crust in those animals which have a *crusta petrosa;* but in man, the osseo-membranous covering is much thicker round the fang than round the enamel, and increases in size with the age of the individual. The capsular investment he considers as the principal agent in producing absorption of the fangs of the deciduous teeth, on the application of adequate pressure from the ascending permanent ones; when that pressure does not take effect, the deciduous teeth remain firm, without limit to their persistence; but when from disease of the fangs, and consequent affection of their investing membrane, absorption does not take place, the fangs of the temporary teeth only partially disappear, while a part of them remains wedged between their permanent successors, so as to render disengagement very difficult. Cuvier and Rousseau are quoted by the author, as being of opinion that pressure produces destruction of the temporary teeth, by removal of their nutriment; while, on the other hand, it is only by exciting the action of the contiguous membrane, which, in some circumstances, may even produce absorption of the fangs of the permanent teeth, though in a less perfect manner, that this process is accomplished. It sometimes happens that the investing membrane assumes a morbid action, and throws out an enlarged growth of cementum, or exostosis. This disposition may be induced by exposure to the atmosphere; by partial destruction of the membrane; by the irregular pressure of antagonist teeth, or want of pressure from their absence.

Whether the absorption of the alveolar processes following the exhibition of mercury, or other mineral medicines, be the work of the investing membrane, the author has not satisfied himself. Alveolar abscess sometimes takes place suddenly, from death of the fang and destruction of its membrane, and whenever disease attacks the latter to any considerable extent, extraction of the tooth is the only effectual remedy.

The third section of the author's subject is the pulp of the tooth, which is a continuation of the capsular membrane, and on which depends the growth of the tooth, or the increment of solid matter of which it may be composed. When the growth of the tooth ceases, the primary function of the pulp is over; but when growth is unlimited, vitality is preserved, and the function goes on. Under various circumstances of disease, whether in animals whose teeth are of limited or unlimited growth, the pulp often becomes osseous, and thus loses its original character. In some animals, however, there is an interstitial osseous deposit, which the author is disposed to consider a fourth natural constituent, in addition to the ivory, or body of the tooth, the enamel, and the *crusta petrosa.*

The author promises to go on with his researches.

[To be continued.]

ART. II.—MEDICAL REPORT OF THE WESTERN LYING-IN HOSPITAL AND DISPENSARY, 31, ARRAN QUAY, DUBLIN.[1]

BY FLEETWOOD CHURCHILL, M. D.,

Licentiate of the King and Queen's College of Physicians in Ireland, Lecturer on Midwifery, &c., and Physician to the Hospital.

During the past year, from January 1, 1839, to December 31, 1839, inclusive, 436 females have been attended; of these 111 were delivered in the hospital, and 325 at their own houses.

From this number we must deduct 18 cases of abortion, which will leave 418 cases of labour.

The number of children born amounted to 425, (254 were males, and 171 females,) 38 of which (26 males and 12 females,) were still-born, or died immediately after birth: of these latter

10 were premature.
5 were breech presentations.
4 were footling do.
2 were arm do.
In 3 the funis prolapsed.
4 were crotchet cases.

The ages of 415 of the patients were ascertained as accurately as possible:

42 were under 20 years of age.
101 between 20 and 25 years.
126 between 25 and 30
71 between 30 and 35
57 between 35 and 40
18 between 40 and 45.

The entire duration of labour was as follows in 309 cases,

In 94 it was under	6 hours.	In 10 it was under	48 hours.
92	12	8	60
75	24	4	95
25	36	1	110

The period which elapsed between the commencement of labour and the rupture of the membranes was noted in 328 cases:

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[1] Edinb. Med. and Surg. Journal, 1840, p. 394.

In 40 cases it was under	2 hours.	In 5 cases it was under	30
107	about 6	4	38
70	10	3	40
43	14	2	50
31	18	3	60
11	22	3	70
9	26	1	80

In the same number of patients the interval between the rupture of the membranes and the birth of the child was as follows:

In 179 cases it was under	1 hour.	In 12 cases it was under	15
42	about 2 hours.	5	20
37	4	4	28
34	6	3	35
12	8	2	40
5	10	1	96

From the birth of the child to the expulsion of the placenta, there elapsed

5 minutes in	74 cases.	40 minutes in		10
10	81	50		2
15	60	60		14
20	30	From 1 hour to	2 hours in	9
25	11	2	3	5
30	14	3	4	4
35	9	5	6	1

In 394 cases the presentation was as follows: In 375 the head presented; 10 the breech; 5 the feet; 3 the arm; 1 the head and arm.

There occurred 7 twin cases. Their sexes and presentations were as follows:

No.	Sexes.	Presentations.	Results.
1.	2 females.	Both head presentations.	Both saved.
2.	Male and female.	Both hand do.	1 saved, 1 putrid.
3.	2 males.	1st foot, 2d head do.	Do. do.
4.	Male and female.	Both head do.	Both saved.
5.	Do.	Do. do.	1 putrid, 1 saved.
6.	Do.	1st head, 2d arm do.	Both saved.
7.	Do.	Both head do.	Do. do.

In 10 cases hemorrhage occurred between the birth of the child and the expulsion of the placenta, in 6 of which manual extraction was necessary. Five of these patients recovered, and one died of peritonitis.

Two patients were attacked with convulsions after labour, one died in a few hours, the other recovered.

Version was performed three times; twice in one of the twin cases; the mother and one child were saved, the second child was putrid.

In the third case both mother and child were saved.

The forceps were applied in one case, the child was putrid, but the mother recovered.

In 4 cases craniotomy was performed. All the women recovered.

Of the 436 cases 3 died, or 1 in 145.

The following tables will show the length of the first and second stages in certain cases, with the results.

Ten cases of labour of thirty-five hours duration.

			Results to	
	1st Stage.	2d Stage.	Mother.	Child.
In 10 cases,	33 hours,	2 hours,	Favourable,	Favourable.
2	31	4	do.	do.
2	27	8	do.	do.
1	24	11	do.	Still-born.

Five cases of forty-six hours duration.

	1st Stage.	2d Stage.	Results to Mother.	Child.
In 2 cases,	42 hours,	4 hours,	Favourable,	Favourable.
1	45	1	do.	Unfavourable.
2	40	6	do.	Favourable.

In three cases of fifty-five hours duration.

	1st Stage.	2d Stage.	Results to Mother.	Child.
In 3 cases,	48 hours,	7 hours,	Favourable,	Favourable.

I shall now give an abridgment of the more important cases from the hospital case-book.

Case 1. *Apoplectic Convulsions.*—Ellen M'Donnell was taken in labour of her fourth child, August 2, and was delivered at 2 A. M. August 3, after a natural labour of ten hours. Mr. Speedy was sent for a few hours afterwards, and on his arrival he found her in a comatose state, with respiration stertorous, pupils insensible to light, &c. Active antiphlogistic treatment was promptly adopted, but she died during our visit at 1 P. M. of the same day.

Case 2. *Epileptic Convulsions.*—Julia Short, aged 17, was delivered of her first child, November 20, after a natural labour of eleven hours. After the expulsion of the placenta she had a slight convulsion, which lasted a few minutes, and then ceased. The fits returned repeatedly in the course of the day, but her friends neglected to send to the hospital, and we consequently did not know it until the pupil who attended her paid his evening visit.

She was immediately visited by Mr. Speedy and myself. We found her insensible, and were informed that the fits returned every half hour, and were evidently epileptic. Her face was flushed, her head hot, with a frequent and full pulse. She was immediately bled largely from the arm, and a purgative bolus and enema ordered. Mr. Speedy visited her at 12 o'clock that night, and, finding that the fits had returned and the pulse still quick, he untied the arm and took away more blood.

November 21, 11 A. M. Convulsions continued through the night, though less frequently; pulse quick and full. *Venesectio ad* ℥xii.; blister to the head and neck; castor oil draught. During the day, the fits were less violent and the intervals longer, but the insensibility continued. In the evening, she seemed occasionally conscious, and she swallowed more easily. Ten ounces more blood were taken, with immediate benefit; fits diminished greatly in violence and frequency, and soon ceased altogether. After this time she recovered rapidly.

Cases 3 and 4. *Version Cases.*—These presented so few peculiarities that I shall not detail them. One of the women had had six children previously, five of whom presented with the hand or arm, and as this was a double arm presentation, (she having twins,) it made seven times that she had undergone the operation of turning. She recovered quite well.

In the other case, the child was saved and the mother recovered.

Case 5. *Forceps Case.*—Mary Dannelly, aged 40, was taken in labour of her first child, April 3. The pains were ineffective for many hours, but they increased the next day, and at 12 P. M. April 4, the waters broke, and the head descended. The pains continued during the night and next day, but did not advance the labour. In the afternoon of the 5th April, I found her pulse quick, skin hot, tongue dry, &c., and it was evident that there would be danger in delay. I therefore applied the forceps, and delivered her easily and without injury. The child was putrid. She recovered well.

Case 6. *Craniotomy.*—Mary Proudfoot, aged 40, of small stature, was seized with labour, January 30, at 11 P. M. At 10 A. M., February 1, Mr. Speedy saw her; the waters had been evacuated, but the *os uteri* was thick, rigid, and undilated; the head presented, and the pulse was quiet. Purgative medicines were given.

At 10 P. M. she was in much the same state, the pains frequent, but not very strong. Tartar emetic was given, with the view of relaxing the *cervix uteri.*

Feb. 2. *Os uteri* still rigid and undilated, though the pains were frequent during the night. Feels wearied for want of sleep; pulse 100 and strong; skin rather hot. *Venesectio ad* ℥xvi.

Feb. 3. The pains improved in strength and frequency after the bleeding, but they prevented sleep, and the patient is consequently much exhausted. The *os uteri* is but little dilated, so that the head remains above the brim of the pelvis. For the purpose of procuring rest, a full opiate was now given, which obtained two hours sleep. The pains then recurred, and continued during the day, and she became feverish, with quick pulse, &c. After consultation with Dr. Darby, although from the condition of the patient delivery was very desirable, yet, as it would be very difficult to accomplish it in this stage, it was resolved to wait until morning, unless the unfavourable symptoms should increase. The opiate was repeated.

Feb. 4. The condition of the patient not improved; pulse 130, with much fever, and but little relaxation of the *os uteri*, though the pains had wedged the head (covered with the cervix) into the upper outlet. It was evident that the operation could not be longer delayed without great risk, and therefore Mr. Speedy proceeded at once to perforate the head and extract the child, which was not accomplished without the greatest difficulty. It was necessary to eviscerate the body as well as empty the cranium. The operation occupied three hours. The child weighed 15 lbs. The patient had afterwards a slight attack of peritonitis, which was subdued by the usual remedies, and she ultimately recovered.

CASE 7. *Craniotomy.*—Rose Bentley, aged 24, taken in labour, February 9th, at 7 A. M. The waters were soon afterwards discharged; the head was found presenting, and the pains were strong and frequent. About 3 P. M. the head descended into the cavity of the pelvis; and at 7 P. M. had made no further advance, notwithstanding very severe and frequent pains. Pulse 80, but intermitting; neither headache nor fever.

I was sent for at 11 P. M., and found the patient in the condition first described, and, as the general condition was favourable, I did not think it right to interfere, although the head had made no advance for eight or nine hours.

Feb. 10, 5 A. M. We were summoned to the patient in consequence of her condition having become worse. The pains had continued strong for some hours after our last visit, but latterly became weaker; the pulse had risen, and there was much constitutional suffering. The head had not advanced, and it was evident that the natural powers were inadequate to the delivery.

I attempted to use the forceps, but found the head so impacted in the pelvis, that the blades of the instrument could not be introduced. This being the case, I at once perforated the head and extracted the child. The woman recovered well.

CASE 8. *Craniotomy.*—Mrs. Tully, aged 20. Labour commenced at 10 A. M., May 4, and the membranes gave way immediately. The pains continued strong during the day and in the evening; the head descended into the pelvis. The pains were incessant during the night.

May 5th, 11 A. M. Pulse 100; patient complains of headache; skin hot; some abdominal tenderness; no advance of the fœtal head. The urine was drawn off, and a purgative enema given.

A consultation with Dr. Darby was held in the evening. The labour had made no advance. The patient was in a state of high excitement, with headache, quick pulse, and much fever. It was determined to deliver by craniotomy, which Mr. Speedy accomplished with facility. The placenta was afterwards extracted. The woman recovered.

Case 9. *Craniotomy.*—Eliza Doran, aged 40. Labour commenced at 9 A. M., October 31, followed by rupture of the membranes and suspension of uterine contractions.

September 1, 11 A. M.; the pains returned strongly and frequently, the head presented, and the condition of the patient was good. The head descended into the pelvis in the afternoon, and then remained stationary.

September 2, 1 P. M. Very little advance has been made, and the constitution is beginning to suffer; the pulse is quick, the tongue dry, and the patient restless. A consultation was held, and it was deemed safe to wait a few hours to give a fair trial to the natural powers.

In the night her condition became more unfavourable, and we were again summoned. It was evident that delivery could no longer be delayed with safety. The forceps were applied, but the head could not be moved, and therefore the head was perforated by Mr. Speedy, and the child extracted. She was attacked with hysteritis afterwards, but was relieved by the usual means.

Case 10. *Puerperal Peritonits, fatal.*—Mary Dunne, aged 36, admitted into hospital on Friday, April 23. Her labour could scarcely be said to have fairly commenced. She had occasional pains for some days, for which opium was given, as they deprived her of rest without dilating the *os uteri.* During this time her mind was anxious and depressed, and her pulse rather quicker than natural.

On Saturday, April 27, true labour-pains came on, and on Sunday morning at 6 o'clock she was delivered of a living female infant. Before the placenta was expelled, alarming hemorrhage came on, and Mr. Speedy removed the placenta manually. The flooding was arrested, but not before it had blanched the patient, and reduced her to an almost lifeless state. By the diligent exhibition of stimulants, reaction was produced, and the patient appeared likely to do well, until Monday evening, when she became slightly delirious, with very quick pulse, but no abdominal tenderness. On Tuesday morning, these symptoms had subsided, but towards evening they returned worse than before. The pulse was very quick; the respiration hurried; the abdomen swollen and tender; and the countenance anxious and collapsed; with delirium, &c. All the most appropriate remedies were tried, but with no effect, and she died on Wednesday, at 10 A. M.

Post mortem examination twenty hours after death.—A quantity of serum with flakes of lymph was found in the peritoneal sac, and a degree of vascularity of the serous membrane itself. The uterine veins contained purulent matter, but the substance of the uterus was healthy; the right ovary was dropsical; the other viscera were sound.

This poor woman had been very anxious for some time previous to labour, on account of a situation for which she was a candidate, and this may have had an unfavourable effect upon the labour.

The notes of the third fatal case have unfortunately been lost.

Art. III.—CASE OF ADIPOSE SARCOMATOUS TUMOUR IN THE ANTERIOR MEDIASTINUM, WITH REMARKS.[1]

BY J. MOORE NELIGAN, M. D., CORK.

George Attenborough was admitted into the county Tipperary Jail Hospital at Clonmel, April 30th, 1838; a private soldier of the 19th regiment of foot, aged 21, with light hair and delicate complexion, slender in person, and a narrow, contracted chest. He complains of a difficulty of breathing, with some pain in his chest, which is not increased on taking a full inspiration. Has had cough without expectoration for the last three months, and which affected him principally on rising in the morning, and for some time afterwards. There is dulness on percussion in the infra-clavicular regions on both sides, and the respiratory sound is somewhat bronchial.

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[1] Edinb. Med. and Surg. Journal, 1840, p. 372.

On admission a blister was applied to the sternum, and he was ordered a mixture containing tartrate of antimony in solution.

May 5th. Since last report he has continued to mend, and the pain of chest and difficulty of breathing have nearly disappeared. Ordered to use the tartar emetic ointment night and morning, until an eruption was produced on the chest.

May 7th. This morning Attenborough drew my attention to a tumour, which he said he had perceived for the first time on the previous evening. It was situated at the top of the sternum, filling up the space between the sterno-clavicular articulations, and about the size of a large walnut. As he was of a scrofulous habit of body, and the swelling had the appearance of a glandular enlargement, I ordered him to take twenty drops of the tincture of iodine three times daily, and to rub a small portion of the following ointment over the swelling night and morning:

℞. *Iodinii grana duodecim; Hydriodatis Potassæ, drachmam unam; Adipis præparatæ, sesquiunciam. M.*

May 12th. Since last report the swelling has considerably increased, and the alæ of the thyroid gland are very much enlarged. He complains that the difficulty of breathing has again returned; but says that it is not caused by the swelling, and points to a spot over the *os hyoides* as the place where he feels the obstruction to exist. He also says that he finds great difficulty in swallowing, particularly liquids.—*Continuentur medicamenta.*

May 14th, six o'clock, A. M. I was sent for to see Attenborough, as the nurse thought that he was dying of suffocation. On arriving at the hospital I found him sitting up in bed gasping for breath; the veins of the face and neck swollen, the extremities cold, and the pulsation of the radial artery at the wrist to be felt with difficulty. I immediately proposed opening the larynx; but he refused to submit to any operation, and as, from the situation of the swelling, I was doubtful as to the relief which would be obtained, I did not persist. A blister was ordered to be applied to the throat, and he was directed to take five grains of blue pill every six hours.

Eleven P. M. He has passed the day pretty well until about half an hour since, when he was seized with a return of the paroxysm. He jumped out of bed and ran to the window, crying out for air. He inspires now with the utmost difficulty, and grasps his throat with his hands. His lips are livid, and the circulation seems to have nearly ceased in the extremities; but he still resolutely refuses to submit to any operation.

He was ordered to have immediately a draught consisting of a scruple of laudanum, half a drachm of sulphuric ether, and half an ounce of camphor mixture; and the same to be repeated in the course of four hours.

15th, 10 A. M. He appears somewhat better this morning, and since taking the second draught has had some sleep; but the difficulty of inspiration is still very great. The blister has risen well, and there is a free discharge from the surface. Half a drachm of the mercurial ointment to be rubbed into the inside of the thighs night and morning. Pills to be continued.

Seven P. M. Breathes rather easier, but has had a slight return of the paroxysm in the course of the day. Complains of a constant short cough, with no expectoration.

16th. Spent a better night. The gums are tender. Mercurial inunction to be discontinued; pills to be taken twice daily.

17th. Passed a tolerable night. No return of paroxysm; but complains of great difficulty of breathing, with a sense of impending suffocation, which he, for the first time since his illness, states to arise from the pressure of the tumour. Pulse 120, small and feeble; tongue clean, moist; bowels freed twice during the night; blistered surface discharging freely. Iodine drops and mercurial pills to be continued.

18th. Has slept well during the night; breathes much easier, although the tumour is still increasing. Pulse 100, fuller than yesterday, but still weak; tongue clean, moist; three motions since last visit; gums tender; no discharge as yet from salivary glands. Pills to be taken three times daily.

19th. A good night; breathing easier; pulse 98, as yesterday; tongue clean, moist; bowels regular; salivary glands a little affected. Pills to be continued.

20th. Has had a return of the difficulty of breathing during the night, caused, he states, by the pressure of the tumour, which is increasing rapidly; but no feeling of fluctuation can be discerned after the most careful examination. Discharge from salivary glands has ceased, and he complains much of dryness of the mouth and fauces; pulse 108, small, feeble; tongue clean, dry, of a bright red colour; bowels natural; mercurial inunction to be used twice daily as before.

21st. Difficulty of breathing much increased; was troubled with cough and pain in the side during the night. Towards morning spit up purulent matter streaked with blood. Other symptoms as yesterday.

℞. *Hydrargyri Iodidi, grana tria; Extracti Hyoscyami scrupulos duos. M. Divide in Pilulas duodecim; unam ter in die sumendam. Repetatur infrictio unguenti Antimonii Tartarizati.*

22d. The difficulty of breathing has increased so much since yesterday, that he has been unable to procure any rest, and the least motion causes a feeling of suffocation. The pulse cannot be felt at the wrist, and he appears to be sinking. He suffered much from this time until 12 o'clock at night, when he died, retaining his senses until a few moments of his death.

Inspection fourteen hours after death.—An incision was made from the *os hyoides* to the sternum, and the skin and superficial fasciæ carefully dissected, so as to expose the tumour, which was apparent during life. It was found to be deep-seated, and closely enveloped by the muscles, which were partly converted into adipose tissue. To expose it more fully, the sternum and cartilages of the ribs were removed. A large tumour was now seen filling up the anterior mediastinum, being firmly attached, anteriorly to the under surface of the sternum, from which it was with difficulty dissected, posteriorly to the pleura and pericardium; which was much thickened, and imbedded in the substance of the tumour. Superiorly the thyroid gland was pressed upwards by it, and inferiorly it had firm attachments to the diaphragm. It extended to either side about an inch beyond the union of the bones and cartilages of the ribs.

The tumour, with the larynx, heart, and pericardium, was now removed from the body. Two quarts of a transparent greenish fluid were contained in the left side of the chest, and one quart in the right. There were no adhesions between the lungs and pleura, nor were there any marks of inflammation present. The lungs and bronchial tubes were healthy throughout, except at the origin of the left bronchus, where were two small openings communicating with glandular bodies containing purulent and tubercular matter. The trachea was inflamed internally where it was pressed upon by the tumour, and at the origin of the bronchial tubes its diameter was considerably lessened by a tendinous band which surrounded it internally. The larynx was healthy, nor was there any appearance of its having been at any time diseased.

No fluid was found in the cavity of the pericardium; but the surface of the heart was covered with granulations, seemingly as if the process of ulcerative absorption had been going on for some time, in consequence of the pressure to which it was subjected. On cutting into the left ventricle, its parietes were found considerably reduced in thickness, and at the apex the muscular fibres were converted into fat; the right ventricle was somewhat thicker, but its cavity, as also the cavities of both auricles, were much smaller than natural. The valves were all healthy, but there was a blush of redness in the inside of the aorta, the calibre of which vessel was much reduced. The tumour measured 14 inches in length, and 4½ in breadth, and weighed, with the heart, 4½ pounds.

The viscera of the abdomen were all healthy.

The consideration of the symptoms which were developed in the case of Attenborough, affords much that is interesting and instructive, as well from the novelty of the disease, as the difficulty which was experienced in forming a diagnosis. The growth of a tumour of any description within the cavity of the chest is of very rare occurrence, and there are but few such cases on record. An account, then, of one in which the tumour acquired so great a magnitude, and with so little disturbance to the animal economy until a short period before death, cannot fail to be an important addition to the science of pathology, which has latterly become so important a branch of medical knowledge.

I regret much that I have been unable to trace the previous history of this case, further than the account which the patient himself gave me, that, previous to his confinement in jail, he had never been at all ill, and that, as far as he knew, none of his family were ever affected with any glandular disease. That the tumour could have been developed, and attained such a size from the period of his first complaint, about three months before his death, is not at all consonant with what we know of the growth of adipose tumours; for although they attain a very great magnitude, they increase in size but slowly. How, then, are we to account for its not giving rise earlier to uneasy sensations, when even in its earliest stages it must have pressed an organ so essential to life as those contained within the chest?

The symptoms from the first assumed a paroxysmal character, in consequence, I suppose, of the *par vagum* and sympathetic nerve being involved in the diseased mass. This, connected with his own statement, that the cause of the sense of suffocation which he found so distressing, was situated at the commencement of the larynx, and a blush of inflammation, which was visible on examining the pharynx, led me to suppose, on the morning of the 1st of May, that he was labouring under an attack of *œdema glottidis;* and with this opinion Drs. Bell and Scully, who saw the case with me, coincided. He at that time complained little of the swelling, which was situated over the thyroid gland; and our belief that it was merely an enlargement of that body, gave us reason to suppose that, although the operation of tracheotomy would be very doubtful in its termination, it might be performed if necessity should compel us.

The state of the surface of the heart in this case was very remarkable. In the report of the *post mortem* examination, I have stated that it seemed as if the process of ulcerative absorption had been going on for some time; and I do not know any other term by which I can so well express the appearance which it presented; and what renders it more worthy of observation, the opposed surface of the pericardium was perfectly smooth; nor was there any fluid contained in the pericardial cavity.

The immediate cause of death was the effusion into the pleura, which must have taken place very rapidly, as, until a few hours before his death, he was able to sit up in bed, and lie equally well on either side.

I cannot give any information as to the stethoscopic indications for some time previous to his death, as, in consequence of the tenderness of the surface of the chest, from the repeated blistering and use of the tartar emetic ointment, he was unable to bear the application of the instrument.

BIBLIOGRAPHICAL NOTICES.

Smith's American Medical Almanac.[1]

We drew favourable attention to the two first impressions of this useful annual. That for this year contains, amongst other useful matters of daily interest, an account of the present condition of the various medical schools of the United States; with brief essays on practical subjects that are important to all.

Dr. Lindsly's Introductory Lecture.[2]

The title of Dr. Lindsly's lecture indicates its general objects. It is devoted to an examination of the peculiar features of the profession in the countries of Europe most distinguished for their scientific reasearches, as well as in this country. We might differ from the respectable author in certain of his estimates of men and things, but on the whole approve of his views, which are evidently suggested by an ardent desire for the advancement of his profession.

Fourth Annual Report of the Trustees of the Vermont Asylum for the Insane.[3]

We are indebted to Dr. Rockwell—the superintendent—for this report, which, like the reports from all our insane establishments, contains much that is gratifying to the philanthropist and the physician. The institution appears to be in a most wholesome state. Would that we had a similar establishment in Pennsylvania! It cannot be postponed long, under the powerful feelings of interest excited in every charitable bosom towards the most helpless of the human family, whose condition in the absence of such institutions is wretched in the extreme.

Operation for Strabismus.

This novel operation has been practised to a great extent by several of our surgeons. Professor Pancoast informs us that he has performed it nine times, and with great success. It seems, indeed, to be admirably adapted for the removal of a most unsightly deformity.

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[1] The American Medical Almanac for 1841; designed for the daily use of Practising Physicians, Surgeons, Students, and Apothecaries. By J. V. C. Smith, M. D., Editor of the Boston Medical and Surgical Journal. Vol 3, continued annually. 24mo, pp. 148. Boston, 1841.

[2] Medical Science and the Medical Profession in Europe and the United States, an Introductory Lecture. By Harvey Lindsly, M. D., Professor of Obstetric Medicine in the Columbia College, Nov. 1840. 8vo, pp. 35. Washington, 1840.

[3] Pp. 15. Montpelier, Vermont, 1840.

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For the American Medical Intelligencer.

ART. I.—EFFICACY OF HYDRIODATE OF POTASSA IN THE CURE OF RHEUMATISM.

BY E. D. CONNOR, M. D.

Demopolis, November 24th, 1840.

Dr. R. Dunglison,

Dear Sir,—Allow me to add another to the many proofs of the efficacy of the Hydriodate of Potassa in the cure of Rheumatism.

Yours, respectfully,
E. D. CONNOR, M. D.

C. D. C——, aged 49, has for several years past been complaining of slight rheumatism in the right shoulder and arm, but in every other respect is in perfect health. Being of quite a sanguine temperament, and fond of good living, he allowed the disease to run its course until the last summer, when in the month of May he was taken with violent pains in both the upper extremities and left ancle, with great derangement of his general health, accompanied with great nervous irritability, so much so, indeed, as to render him almost a sleepless being. He applied for medical aid, and being in what is termed good circumstances, procured the best the country could afford. The whole list of remedies commonly used in the cure of this disease was run down, and no relief was obtained. In July I saw him in consultation with my former preceptor, who at the time was busily engaged in practice, and left the care of the case to myself; and having seen colchicum used by yourself with great good effect, I put him on the use of it, but derived no benefit from it. Much time passed in the use of various reputed remedies, and the patient grew worse daily, until about the middle of August, when he became almost helpless; and from the great nervous irritability his mind seemed to be failing, and was fast advancing into second childhood. I mention this to show that time had not done any thing towards the cure. On the first of September I was able to procure some of the hydriodate of potassa; I commenced the use of it in the proportion of thirty grains to the ounce of water, of which solution I gave him twelve drops three times daily, increasing a drop each day; when, much to my astonishment, in one week's time he was so far enabled to use his right arm as to shave himself, and in three weeks was entirely well, and has since that time enjoyed perfect health. When I last saw him, about ten days ago, he said that he never in his life felt better. I neglected to state above, that during the whole course of the disease, from May to September, proper attention was paid to diet.

ART. II.—MEDICO-CHIRURGICAL TRANSACTIONS.

Concluded from page 248.

The preponderance in number of the communications in the present volume are the pathological, which we shall now take in the order of their occurrence. The first comprises *Cases of Spasmodic Disease accompanying Affections of the Pericardium;* by Richard Bright, M. D., F. R. S., President of the Society, Physician Extraordinary to the Queen, &c. These cases are three in number; and in each of them the pericardium was seriously implicated; and it appeared to the author that the phrenic nerve was the more immediate means of communicating irritation to the spinal chord. In the first case, severe chorea came on after symptoms which bore a good deal the character of acute rheumatism. The patient died about the 16th day after the occurrence of the spasmodic symptoms; and on examination, the heart, pericardium, and contiguous part of the lungs, bore distinct marks of considerable recent inflammation.

In the second case, trismus, and convulsive affections, bearing sometimes a tetanic character, followed on acute rheumatism, and, in twenty hours from their attack, proved fatal. Severe inflammation was found in the chest, particularly on the pleura of its right side, and on the right side of the pericardium, down which the phrenic nerve runs.

The third case was one of much glandular disease in a female of 17, where *phthisis pulmonalis* was suspected; and where severe dyspnœa, resembling that of hysteria, supervened, and assisted in gradually wearing out the patient. Extensive glandular disease was found in the abdomen; but the chest and lungs were free from all tubercular deposit.

"The heart and pericardium formed a hard mass, firmly glued to the sternum by the white fungoid matter deposited in the anterior mediastinum, so that on raising the bone, they were round like a hard tumour attached within.

"The heart itself presented a curious specimen of disease: a thick layer of yellow malignant matter lined and covered the pericardium, both the portion attached to the heart and the reflected portion; the two deposits were strongly glued together in most parts, and were a quarter of an inch in thickness. In other parts the two layers were easily torn from each other. The phrenic nerve was seen on the right side, passing down, pressed upon, and almost imbedded in this diseased mass.."—P. 17.

A plate of the appearances is given. The alternation of chorea with acute rheumatism has been long known or suspected; and that pericarditis follows, and, through the medium of the phrenic nerve, produces in the spine that affection which gives rise to convulsive paroxysms, there is, he thinks, every reason to believe. He is not of opinion with some authors, that inflammation in or about the spine is necessary to the production of chorea.

In addition to the authorities referred to by Dr. Bright, it may be observed, that pericarditis, with choreiform symptoms, is mentioned by Dr. Craigie as having been observed by him, and also by Dr. Roeser, of Bartenstein. (Practice of Physic, vol. ii. book ii. chapter iii. § iii. p. 151.)

Memoir on Typhlo-Enteritis; or Inflammation and Perforative Ulceration of the Cæcum, and of the Appendix Vermiformis Cæci; by John Burne, M. D., Physician to the Westminster Hospital, Lecturer on the Practice of Medicine, &c. This paper may be regarded as a continuation of one on the same subject which appeared in the twentieth volume of the Medico-Chirurgical Transactions, and it contains several additional cases, in further illustration of the pathology of the cæcum and appendix.

The liability of the cæcum to have a lodgment of undigested substances in it, produces irritation and great disposition to symptomatic inflammation in this part of the alimentary canal; which latter, when it occurs, usually terminates by resolution; the subsidence of the spasm and removal of the inflammation allowing the muscular coat of the cæcum to resume its functions. No instance of perforative ulceration of the cæcum from internal disease has occurred to the author; but perforative ulceration from without he states to be common, owing to abscesses resulting from perforation of the *appendix vermiformis* bursting into the cæcum. Several interesting cases are given of inflammation of the appendix, and perforative ulcerations of that portion of the gut, and their consequences. The author is of opinion that Dupuy has formed an erroneous conclusion, when he viewed the occurrence of abscesses bursting into the cæcum as having originated in its cellular texture, instead of being secondary, and consequent on perforative ulceration of the cæcum or its appendix. He does not conceive that there is any reason for supposing that inflammation of the mucous membrane of the cæcum can ever give rise to inflammation in the adjacent subcæcal cellular tissue.

Case of Carditis; by Thomas Salter, Esq., F. L. S., of Poole. The case occurred in a man of 50; and the principal symptoms were dull and heavy, but not lancinating, pain in the lower part of the chest, rather inclining to the left side; very severe oppression and distress in breathing, increased at intervals, but never quitting him; a frequent and small pulse; inability to lie down, and a feeling as if he could not live. There was no cough, nor sign of pulmonary affection, and frequently considerable uneasiness in the left upper arm. The symptoms continued to a certain extent for about six weeks; but they were most severe and alarming for sixty-five hours only before death.

On examination, the heart was found to be rather larger than natural, and of moderate firmness; large white or yellowish coagula were contained in the cavities; and commencing ossification was discovered in the ascending aorta, but no disease in the lining membrane of the heart, or in the valves. The muscular substance of the left ventricle was of a light yellow hue and fibrous texture; and exhibited purulent matter at the surfaces of the various sections that were made in it. In some parts, small cavities filled with purulent matter were found, varying from the size of a pin's head to that of a small pea.

The pericardium exhibited "unusual vascularity," which was attributed by the author to inflammation; though there was neither on this nor on the surface of the jejunum, (which was likewise stated to be much inflamed,) any effusion of coagulable lymph, which might have been expected to appear under such circumstances.

On the Softening of Coagulated Fibrine; by George Gulliver, F. R. S., Assistant Surgeon to the Royal Regiment of Horse-Guards. The author's object in this paper is to ascertain the differences which exist between various modifications of animal matter and pure purulent matter; and he has been able to infer, that softened fibrine, which has generally been regarded as a purulent fluid, is, notwithstanding, of an essentially different character. His experiments and observations were made on fibrine from the heart; on that obtained from venous blood by agitation; on the fibrinous concretion formed by inflammation on the pleura of a dog; on softened fibrine in the heart and aorta; and on softened fibrine in the veins. His general deductions are the following, viz.

"1st. That coagulated fibrine, when removed from the body and subjected to a blood heat, commences to soften in about forty hours, assuming the colour and consistency of pus, but easily distinguishable from it by microscopic and chemical examination.

"2d. That the purulent-like fluid found in the fibrinous clots of the heart and arteries, and so frequently in the veins, is essentially distinct from pus, and analogous to, if not identical with, softened fibrine.

"3d. That the softening of coagulated fibrine is an elementary pathological condition of frequent occurrence, distinct from suppuration, and constituting a considerable proportion of the cases generally denominated suppurative phlebitis.

"Lastly. I may observe, that I have frequently found pus mixed in considerable quantities with the pulpy fibrinous matter; and in two instances some purulent globules were observed, completely insulated, in the centre of a clot, from the neighbouring tissues. But in both these cases pus was also detected in the blood; and when it is considered how frequently this contamination exists, it will not appear surprising that the particles of pus should become entangled in coagula contained in the vessels. Nor does this circumstance at all invalidate the conclusion, that the softening of coagulated fibrine is a disease of much interest and importance, quite distinct in its nature from suppuration, although the two affections have been generally regarded as identical."—Pp. 151, 152.

It is a particular source of gratification so often to see, that gentlemen who are connected with the public medical service, have talents and disposition to employ that leisure which peace affords them, in useful inquiries for the improvement of their profession. The general taste and acquirements of the profession in the public service, as well as in civil life, have fortunately much increased of late years; and the country owes very important obligations to Sir James Macgrigor, the Director-General of the Army Medical Board, for his efficient and successful endeavours to raise the character of army medical men, by the superior education required of them, and by that cultivation of the collateral sciences which they are encouraged to make, and which more effectually enables them to profit by the opportunities so extensively afforded them, both in active and quiescent service, of advancing the interests of science, and promoting the credit and usefulness of their profession.

Contributions to the Pathology of the Spinal Cord; by William Budd, M. D. This communication contains some very valuable cases from the author, from Mr. Busk, of the Dreadnought, and Mr. Granger, in illustration of the operation of the reflex function, as it has been termed, in man; and to show that the phenomena attaching to it take place in the human race just as in the lower animals.

When an animal is decapitated, and a stimulus applied to the surface of the body, the influence of that stimulus is applied to the spinal marrow, and being thence *reflected* to the motor nerves, causes, as is well known, contraction of various muscles. A similar effect the author found to take place in cases of paralysis arising from spinal affection.

In one of those cases, sensation in the lower extremities was nearly extinguished, and the power of voluntary motion entirely lost. But when any part of the limb was pinched or pricked, though there was a very trifling sensation produced by the act, the limb jumped up with great vivacity; the toes were retracted towards the instep; the foot raised on the heel; and the knee bent so as to raise it off the bed; the limb being maintained in that position for several seconds after withdrawing the stimulus, and then becoming suddenly relaxed. The tickling of a feather on the instep, though not at all felt by the patient, produced still more violent convulsions; and this always occurred with much force during defecation and micturition; some mechanical means being obliged to be employed to secure him during these acts.

In all the cases mentioned, the involuntary movements were of the same character as those observed in decapitated animals, and were quite independent of volition. They were not associated with a sense of fatigue, but the power which caused them was subject to exhaustion, and was renewed by rest. Heat was a powerful means of excitement; and strychnia, given internally, increased the susceptibility to involuntary movements, while prussic acid and digitalis had a contrary effect. From a consideration of the fact, that the convulsions of tetanus are either capable of being produced or increased by impressions made on the skin and senses, the author is induced to consider it as proper to avoid, in this complaint, multiplying impressions, especially those of a painful kind, as leeching, cupping and blistering, or even purging. He thinks, also, that, as opium given to animals before decapitation renders the motor actions of the spinal cord more active and powerful, it is to be avoided in the treatment of tetanus, which may with more propriety be entrusted to the operation of hydrocyanic acid, conium, and digitalis.

Memoirs on some Principles of Pathology in the Nervous System; by Marshall Hall, M. D., F. R. S. L. and E. This is the first of a series of memoirs, which it is the intention of the author to communicate to the society, on the subject of nervous action under various circumstances of disease. It is entitled, *On the Condition of the Muscular Irritability in Paralytic Limbs*, and is to be followed by a second memoir, containing the author's deductions on the reflex action in certain cases of paralysis, tetanus, &c., and on the retrograde action in cases of disease of the spinal marrow.

In the present communication, the author enters at some length into an examination of the discrepancies of opinion which have taken place among the most distinguished authors, in relation to the existence (which some affirm and others deny) of irritability in the muscular fibres of paralytic limbs. Those discrepancies he considers as being amply accounted for, by the difference of the phenomena which occur in respect to *cerebral paralysis*, or that which removes the influence of the brain; and *spinal paralysis*, which removes that only of the spinal marrow.

Strychnine, when exhibited on paralytic patients, often manifests its powerful influence on the paralytic limbs, to the exclusion of the sound ones, though its power must have been supposed to be equally diffused down the spinal marrow along the nerves to the right and to the left, and therefore to the muscles which those nerves supply. It therefore appeared to him, that the irritability of the fibre, in the cases where the paralysed muscles were most affected, must have been augmented; and it is to this result that his experiments and observations lead. When there was cerebral paralysis only, he found that slight shocks of galvanism, which would produce no effect on sound limbs, agitated paralytic ones; whereas, if the disease arose in the course of the nerves, or within the lumber vertebræ, the muscles of the paralytic limbs were much less irritable than those of the sound.

"I visited a patient," says the author, "affected with hemiplegia, including paralysis of the face, and I passed a slight galvanic shock through two pieces of metal, of which one was placed over each cheek. The muscles of the paralytic side were most affected. I repeated the experiment with the same result. I now compared with these two cases of injury of the facial nerve, passing the galvanic shock in the same manner through the fibres of the orbicularis: it was now the muscle of the healthy side which was affected by the galvanism, the eyelid of that side being closed, whilst that of the paralytic side gaped as before. I next compared the effect of galvanism in two cases of complete paralysis of the arm, one hemiplegic, the other the result of dislocation of the shoulder. The muscles of the former were more, those of the latter less, irritable than those of the healthy arm respectively, as were also those of the arm of a patient affected with the paralysis induced by lead. Lastly, I compared the cases of paralysis of the lower extremities, one arising after pertussis, and therefore cerebral, the other, I think, from disease within the lumbar vertebræ: in the former there was augmented, in the latter diminished, irritability."—Pp. 203, 204.

The author concludes, therefore, that, "in cerebral paralysis, the irritability of the muscular fibre becomes augmented from want of the application of the stimulus of volition; in paralysis arising from disease of the spinal marrow and its nerves, this irritability is diminished, and at length becomes extinct, from its source being cut off.

"We may further deduce," he continues, "from the facts which have been detailed, that the spinal marrow, and not the cerebrum, is the special source of the power in the nerves of exciting muscular contraction, and of the irritability of the muscular fibre; that the cerebrum is, on the contrary, the exhauster, through its acts of volition, of the muscular irritability.

"As a further deduction from the same facts, we may infer the diagnosis between cerebral and spinal paralysis: mere cerebral paralysis is attended by augmented irritability, whereas spinal paralysis is that which is attended by diminished irritability."—P. 205.

A Case of Enlargement from Melanoid Tumour of the Prostate Gland, in a Child of five years of age; by R. A. Stafford, Surgeon to the St. Mary-le-Bone Infirmary. The subject of this case had, for three or four months, an irritable bladder, with a continual wish to discharge urine; and a large and tumid abdomen. On the occurrence of entire inability to pass his water, and the appearance of a large tumour in the abdomen, which was found on examination to be a distended bladder, the elastic gum catheter was passed, and twenty-five ounces of natural coloured urine were drawn off. As accumulation took place rapidly, the catheter was left in the bladder; but the boy sank and died in eight days.

The bladder was found to be contracted to the size of a turkey's egg, and to have some purulent matter mixed with about one ounce of urine which it contained. The prostate gland was equal in size to the largest walnut, and had its third lobe about the magnitude of a hazel-nut, which is about the size of the whole prostate in a child of his age. It was encephaloid in colour, consistence, and texture, but one part of the cut surface was so dark as to present the appearance of their being melanotic, mixed with the encephaloid matter.

Case of Congenital Absence of the Pericardium, with observations; by T. B. Curling, Assistant-Surgeon to the London Hospital, &c. In this case, paralysis of the lower extremities arose from exposure to wet, and gradually extended upwards, producing, after some weeks, asphyxia and death.

The principal diseased appearance was ramollissement of the central part of the whole *medulla spinalis;* but on opening the chest, the heart was found to be completely exposed, lying loose in the cavity of the pleura, in immediate contact with the lung, but without any appearance of pericardium, except a slight sort of rudiment of one on the left side.

Cases are mentioned of the absence of pericardium, from Baillie and Breschet, and from Woolf, Walter, and some others; and the author considers the opinion of Dr. Baillie as far too restrictive, when he regards the use of the pericardium as being merely to keep the heart in a steady position; for it seems to him, that inclosure in a serous bag, separate from that of the lung, must be a great exemption from the effects of inflammation. It may be remarked, however, that deposits of lymph are not unfrequently found on the surface of the heart, without the previous production of any serious symptoms of an inflammatory nature.

On a Peculiar Form of Congenital Tumour of the Neck; by Cæsar Hawkins, Esq., Surgeon to St. George's Hospital. The author adverts to a great variety of encysted tumours which are occasionally found in infants; but directs his particular attention to a peculiar form of congenital tumour appearing in the face and neck, which is composed of many cysts united together, and having in them so large a portion of organised matter as to give them a solid character. In one of the cases mentioned by him, (there being seven in all,) when death took place, with excessive emaciation, at the age of about three months, the tumour was on the right side of the neck, and about the size of a large orange. It was found to be "composed of a great number of small cysts, many hundreds, probably, varying in size from a pea to a walnut, closely joined together, and composed of delicate membranes, like very fine peritoneum, but in some parts covered by fibrous structure, giving the cysts the appearance of thin pericardium, and very few of them were so far insulated as to admit of being dissected out without cutting through others. The fluid in most of the cysts was transparent, with scarcely any trace of coagulable matter, but in others the contents were of every shade of red, even as dark as venous blood, but without any coagulum, and evidently only coloured secretion."—P. 238.

On pursuing the dissection, the cysts were found to be deeply imbedded in the surrounding substance, and to extend behind the pharynx and œsophagus; some as high as the basilar process, others as low as the sixth cervical vertebra. They were formed in the common cellular texture, and, from their inaccessible situation and intricate connection, presented little promise of benefit from an operation. The cysts did not exhibit much disposition to inflammation, and in one case, repeated punctures seemed, in about a year, to wear out the disposition to further secretion; to reduce the swelling to about a third of its original size; and to leave it a loose pendulous bag, principally composed of skin and fat.

Case of a Girl who voided from the Urethra a number of Entozootic Worms not hitherto described, with an Account of the Animals; by T. B. Curling, Assistant-Surgeon to the London Hospital, &c. With the assistance of Professor Owen, and Mr. John Quekett, the author has been able to give a very good account of the appearance and structure of these little animals, which he illustrates by lithographs taken from drawings made by himself. He refers them to the order Nematoidea of Rudolphi, in which they would constitute a new genus, whose character he thus describes:

"*Genus Dactylius.*—Corpus teres, elasticum, annulatum, et utrinque attenuatum, caput obtusum, os orbiculare, anus trilabiatus.

"*Dactylius aculeatus.*—Capite obtuso, toto corpore aculeorum serie multiplici armato, caudâ obtusâ et annulatâ.

"Hab. in Hominis vesicâ urinariâ."

The females were about four fifths, the males about two fifths of an inch in length.

The patient had been occasionally troubled with ascarides, after some pectoral complaints, and derangement of the intestinal mucous membrane. The worms were discovered in the urine after an attack of measles, which left her weak and much emaciated. After the use of small doses of the *Oleum terebinthinæ*, no more of them were observed, either living or dead.

The only two papers remaining to be noticed in this volume may be regarded as appertaining principally to the subject of obstetrics. The first is *An Account of a Fœtus of Seven Months, with its Placenta partially adherent to a Nævus, occupying the Scalp and Dura Mater;* by Robert Lee, M. D., F. R. S., Physician to the British Lying-in Hospital, and Lecturer on Midwifery at St. George's Hospital. No vascular union existed at the place of junction. The author refers to a few cases of a description somewhat similar.

The second is *On the Structure of the Corpus Luteum;* by Robert Lee, M. D., F. R. S. "The Graafian vesicle in the human ovarium is a small spherical pellucid sac, which contains a fluid, the ovum, and the granular substance in which it is imbedded. The vesicle itself always consists of two distinct coats, or membranous layers, which adhere firmly together. The external surface of the Graafian vesicle adheres loosely to the stroma or proper substance of the ovarium, in which it is imbedded by soft cellular substance, blood-vessels, and nerves.

"Soon after impregnation, the coats of the Graafian vesicle and the peritoneum covering it give way by absorption, the contents of the vesicle escape, and between its outer coat and the substance of the ovary, the *corpus luteum* is gradually formed."—P. 329.

Doubts have, however, been entertained by physiologists as to the precise mode in which the formation of the *corpus luteum* takes place; whether it is produced by a thickening of the inner layer of the Graafian vesicle, or is an entirely new substance, deposited between its coats, or around its external surface; or even capable of being occasionally formed in the ovaries of women who have never been pregnant.

Some opportunities presented themselves to the author, of particularly examining ovaries in two months of pregnancy; and from these he had made the deductions in respect to the structure and formation of the *corpus luteum* which form the subject of his paper. On cutting into the left ovarium, in one of the cases mentioned, which was larger than the right, had a considerable prominence on its convex edge, and a small circular depression at the point of the prominence, into which a bristle could not be made to pass, the author found a *corpus luteum*, of an oval shape, and deep orange colour, with the Graafian vesicle in its centre, having its coats thickened and contracted, and readily divisible into two distinct layers.

"The outer surface of this cyst is so loosely attached by cellular tissue to the *corpus luteum*, that it can easily be separated from it. The *corpus luteum* itself varies from a line to a line and a quarter in thickness, and when examined with a magnifier, appears to consist entirely of small yellow globules or particles contained in cellular membrane.

"Around the outer surface of the *corpus luteum*, and completely investing it, there is a white layer varying in thickness, the outer part of which loses itself in the substance of the ovarium, of which it appears to form a part, and to be similar in structure, having the mouths of divided vessels distinctly perceptible, as in other parts of the substance of the ovarium. The inner portion of this white layer, which appears to be condensed stroma, is separable on the one hand from the *corpus luteum*, and on the other from the substance of the ovarium, so as to give the appearance of a distinct membrane, considerably exceeding in thickness both layers of the Graafian vesicle."—P. 332.

"As gestation advances, the deep yellow colour of the *corpus luteum* fades, and the Graafian vesicle in its centre contracts and assumes a peculiar white membranous appearance, with small bands passing outward through the substance of the yellow matter, like the radii of a circle."—P. 333.

Drawings are given to illustrate these appearances.

From the circumstances now mentioned, the author infers, that the *corpus luteum* is a substance formed round the outer surface of the Graafian vesicle, and has no capsule; that its yellow matter is in contact with the substance of the ovarium; that it almost completely disappears about three months after parturition; and that, though a substance much resembling it is sometimes found in the ovaria of persons who have never been pregnant, this is produced by morbid states of the Graafian vesicle, and the yellow matter found within that vesicle, and not around it. In women who have died during menstruation, (of which the author gives two examples,) appearances are sometimes observed, which might, without careful discrimination, be mistaken for true *corpora lutea*.

ART. III.—DIVISION OF THE MUSCLES OF THE EYE FOR STRABISMUS.

BY J. H. DIX, M. D., BOSTON.[1]

[The following cases have been recently published in the Boston Medical and Surgical Journal, by our intelligent correspondent, Dr. Dix.—ED.]

Division of Internal Rectus.—October 16, 1840. Miss Mary M. C., æt. 23, of Boston, has squinted from birth with both eyes, the left being more decidedly turned in, the edge of the cornea of which frequently reaches the inner canthus. She can, on closing the right, turn the left out nearly as far as the other, but cannot keep it fixed there. Vision has always been weak, and she is conscious that this eye does not assist in seeing.

Drs. Reynolds, Jeffries, Hooper, Bethune, and Charles Ware were present. The eyes being small, and the patient very timid, I found it necessary to control the globe by fixing a double hook through the conjunctiva into the tunica albuginea, about a line and a half from the edge of the cornea towards the inner canthus. By this means the eye being fairly everted, a fine sharp hook was passed through the conjunctiva, and an incision made about half way between it and the double hook. A blunt hook was brought under the muscle, and a division made with scissors in the muscle about half an inch from the cornea, which Mr. Guthrie, whose large experience renders his authority decisive, says is preferable to a division of the tendon. On opening both eyes after the trifling hemorrhage had ceased, the left eye is observed to be straight, the squint of the right being as before. Apply compress wet with cold water. Keep both eyes covered.

17th. No pain, but complains that the eye feels heavy. Bandage removed.

22d. There is a considerable fungous growth from the place of the incision, which is cut off with scissors.

30th. Miss C. has been working at her trade as a tailoress for several days past, and says that after the day's work she finds the eye somewhat turned in. In the morning it is straight. The fungous growth has reappeared, and requires to be touched with nitras argenti.

Nov. 18. Since the last date Miss C. has been obliged to apply herself sedulously to sewing, and the eye is turned in somewhat, a little more perhaps than the right, with which, as was at first stated, she squints a little. Still the eye is by no means so much turned in as before the operation; she has the privilege, as she terms it, of turning it out when she pleases, and finds it serviceable to vision, until it is fatigued by long use. She proposes to have the muscle re-divided when she has an opportunity of resting the eye for a time. The fungous growth has at length disappeared, and the redness at the inner canthus has diminished.

Division of Internal Rectus.—Oct. 16. Mrs. I., æt. 26, of Boston, squinted with the right eye at nine months of age, immediately after hooping cough. The squint is very decided, a portion of the cornea being hidden at the inner canthus. Drs. Doane, Dale, and Parkman being present, the operation was performed as in the preceding case, except that the patient possessing considerable fortitude, I dispensed with the use of the speculum and the double hook, with which in the first case the eye was turned out. She kept the eye steadily everted a little towards the inner canthus. On removing the instruments, the eye was found to be perfectly straight, and capable of turning inward very little. Compress wet with cold water to be constantly kept on the eye, both being covered at the same time. Light diet.

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[1] Boston Medical and Surgical Journal, December 2, 1840, p. 265.

18th. Mrs. I. suffering no pain, and having had none except for about eighteen hours after the operation, and then not severe, I directed the eyes to be uncovered.

20th. Has had some pain, about as much as immediately after the operation, which may perhaps be attributed to her getting chilled by exposure to the night air while looking from the window at a fire. Renew application of cold water. Sulph. magnesia, ℥i.

21st. Eye comfortable. At several times since the operation she has had double vision for an hour at a time, but she has not observed it for three days past. Vision is much clearer and stronger than before the operation, and the only difference perceptible in the eyes, which are both perfectly straight, is, that the right cannot be turned to the inner canthus quite so far as the left.

Nov. 22. Eyes perfectly straight, and motions of both parallel, the right having a farther movement inward than immediately after the operation.

Division of Internal Rectus of both Eyes.—Oct. 17, 1840. Miss Sarah H., of Boston, squinted from birth with both eyes, very badly with the left. On September 9th I divided the tendon of the internal rectus, which was followed by an amendment of the squint, which, however, after a few days, partially returned; and though now the cornea of this eye is not so far turned in as before, she at my request submits to a second division of the muscle. With the assistance of Mr. Stone, who held the lids open without using a speculum, I operated as in the former cases, omitting the double hook. Miss H. kept the eye steadily in the required direction, and upon removing the instruments and opening the other eye, this one is found to be perfectly straight. Right eye to be bandaged and the left turned outward.

Oct. 22. The left eye continues to be perfectly straight, and she has control of its motions in every respect, except that she cannot turn it quite so far into the inner canthus as the right, which squints somewhat inward. The wound has healed, leaving a very slight thickening and redness of the conjunctiva.

Miss H. having expressed a wish to try the effect of the operation on the right eye, I performed, in presence of Drs. S. Keep, Dyer, Dale, and Salisbury, the operation as in the case of the other eye, except that the tendon of the muscle was divided near the globe. There was an immediate amendment of the squint, but not so complete a restoration as in the other eye. Left eye bandaged.

Nov. 23. Vision is much stronger than formerly, owing, I presume, chiefly to an improvement in the left eye, which, as well as the right, continues as last described; one straight, the other turned slightly in. All redness has disappeared from the left eye, and the place of the incision is observed only on close inspection.

Division of the Internal Rectus and Superior Oblique.—Oct. 23, 1840. Wm. Augustus S., æt. 18, of Salem, when four years of age had an inflammation of the right eye, during which the eye was for a long time kept bandaged, and acquired a strabismus convergens. Now the eye is so far turned inward as ordinarily to conceal not only the pupil, but nearly the whole of the cornea, it being, in short, the most decided inversion I have ever seen. Vision with this eye is exceedingly indistinct, patient affirming, at first, that it was blind. On further investigation, it seems that he can just discern the outlines of large objects with this eye at the distance of six feet. The loss of vision is partly to be accounted for by a slight opacity on the upper part of the cornea, but probably depends much more on the entire disuse of the eye for fourteen years. He can, by an effort of the will, turn it out nearly in front, but cannot retain it there more than a few seconds. It was therefore necessary to evert it by means of the double hook, the operation being in every respect like that in the first case. Drs. Channing, Putnam, Morrill, and

Hooper, and Dr. Gustine, of New Orleans, were present. Patient fainted as soon as the division of the rectus muscle was completed. On his recovery the eye was found to be considerably less turned, but still not straight, the squint being perhaps diminished one half. With the approbation of the gentlemen present, I then proposed the division of the superior oblique muscle, to which the patient assented. This was easily accomplished, without enlarging the incision or using the double hook, the eye being now sufficiently everted by the voluntary effort of the patient to bring the incision fairly in view. Passing the blunt hook under the conjunctiva at the upper extremity of the incision, it was readily brought round the tendon of the superior oblique, bringing it fairly into view, so as to be divided with the scissors. The eye immediately inclined slightly outward. He has still the power of turning it a little inward. A compress wet with cold water on the right eye; both eyes to be kept shut.

Oct. 27th. Has had no inflammation beyond the limits of the incision, which seems to be occupied by one large, smooth granulation, not sufficiently prominent to give him uneasiness or to require any application. He often speaks of the increased ability of seeing objects on his right by the aid of this eye, the vision of which he thinks is improving. He is, however, obliged to cover it when exposed to a strong light, an intolerance which must be owing to the continued absence of it, and will gradually abate. The eye is straight, and the axes of the two parallel, except when he is looking far to the right, when the right eye inclines a little to the outer canthus. He returns home, with direction to close the left eye occasionally, and exercise the right, especially in the rotation of it inward; a motion which he can perform to a much greater extent than could be expected after the division of these two muscles.

Nov. 18th. I have not seen Mr. S. since Oct. 27th; but now learn, from his father, that the eye is perfectly straight, and more tolerant of light, though still red at the inner corner.

Division of Internal Rectus.—Nov. 5th. Miss Margaret M., æt. 24, of Boston, seventeen years ago had measles, followed by disease of the eyes, after which it was observed that both eyes squinted, the right very badly. Her mother thinks that in consequence of close application as a pupil, and afterwards as a teacher in school, the squint has been gradually growing worse. Now the right eye is turned so far in, that the edge of the cornea is usually hidden at the inner canthus, though it can be brought out at pleasure. Vision from this eye is not so good as from the left.

Drs. Perry, Wiley, Bartlett, Bethune, and Dorr were present. The lid was raised without a speculum, and the eye sufficiently everted by the patient to render the double hook unnecessary. The conjunctiva and cellular tissue, raised by the small sharp hook, were divided at one incision, with a small and slightly-curved knife. At the suggestion of Dr. Bethune, the lid was now suffered to close for a minute, the hook of course being removed from the conjunctiva. Upon raising the lid, the muscle was reached with the blunt hook as easily as in the preceding cases, and divided with the scissors. The eye became immediately straight. She has the left eye now bandaged, and is directed to turn the right eye frequently out, no application whatever being made to it.

This operation occupied not more than three minutes, including the time that the lids were closed, and was, I believe, less painful than usual, in consequence of removing the sharp hook and closing the eye before the muscle was taken up on the blunt hook. The curved knife is preferable to the straight one, inasmuch as a larger incision may be made with one cut, and when the lid is raised without a speculum, the curved knife is brought out at the upper part of the incision without interfering with the finger of the person who raises the lid.

6th. A slight tendency outward in the right eye, which may yet be turned in by an effort of the patient. Very little pain, but a heavy sensation in the eye. To-day the eye operated on to be turned in as far and as often as possible.

7th. Eye straight, and to be left to itself uncovered. Double vision yesterday, and occasionally to-day.

17th. A slight inclination inward. Left eye to be bandaged, and the right turned forcibly out.

24th. The eye is now again straight, and has been so since last date. The wound in the conjunctiva is nearly cicatrised.

When speaking of an eye as perfectly straight, it is not meant that looking in some one direction, as, for instance, far to the right or left, a trifling want of correspondence in the axes of the eyes may not be detected by a close observer; but that, looking as the person ordinarily does, at objects in front of him, the cornea is midway between the inner and outer canthus, looking forwards. With this understanding, the results of the above six cases may be thus stated: In four the squint is removed, in two it is essentially improved. In every case vision is benefited more or less. In one of the successful cases a second division was made; and in one of the two partially successful cases the operation is to be repeated. The speculum was employed in three cases, and in three the lids were raised by the finger of an assistant. In two cases[1] the double hook was used to evert the globe, and in four it was dispensed with.

BIBLIOGRAPHICAL NOTICES.

Professor Huston's Introductory Lecture.[2]

The members of the class of the Jefferson Medical College acted with judgment in requesting a copy of Professor Huston's excellent lecture for publication. It was well for them to obtain in a more durable form the sound precepts and instruction of an able and favourite preceptor. The object of the professor was to lay before them a brief sketch of the interesting department entrusted to him in the school to which he is attached,—to give to the young obstetrical inquirer a sketch of the difficulties that beset him; and at the same time of the interesting and important nature of the trust that devolves upon him. On this subject we shall permit the estimable author to speak for himself:

"It is our good fortune to live, gentlemen, in an age which is unparalleled for the wide and rapid extension of every department of human knowledge. All the arts and sciences are now cultivated to an extent unknown at any former period. Nor in the revolutions which are going on around us, has the broad field of medicine been suffered to lie an uncultivated and barren waste. Certainly at no former time has the science presented an aspect so interesting as at the present moment. Many of its cultivators are distinguished for bold inquiry and profound observation, and discoveries and improvements are the daily fruits of their labours. Chemistry, natural philosophy, mechanics, all the arts and kindred sciences, are aiding to accelerate its progress. The press teems with matter. Essays, full of learning and deep investigation, on nearly every important subject, pour in upon us from the various quarters of the globe, almost too rapidly to admit of being read.

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[1] In one of these cases, it may be remembered, it was used only to evert the globe previous to the division of the internal rectus, the superior oblique being divided without it, after the division of the first muscle had enabled the patient to turn the eye partially out.

[2] Introductory Lecture to the Course of Obstetrics, and Diseases of Women and Children, in Jefferson Medical College of Philadelphia, for the Session of 1840–41. By R. M. Huston, M. D., Professor of Obstetrics and the Diseases of Women and Children in Jefferson Medical College, Senior Physician to the Lying-in Department of the Philadelphia Hospital, Fellow of the College of Physicians, and Honorary Member of the Philadelphia Medical Society, &c. Published by the Members of the Class. 8vo, pp. 22. Philadelphia, 1840.

"But every faithful picture presents its dark shades, as well as its beautifully coloured figures; and this is also true in the present instance. Many of the statements which are daily submitted to our notice have no better foundation than weak credulity or base imposture. Of the so called systems and theories which are pompously set forth to challenge our acceptance, not a few may be denounced as wild vagaries or groundless hypotheses; and while we are continually receiving, from all quarters, valuable additions to our stock of knowledge, we are deluged through the same channels with much that is calculated to mislead the young, and confound the inexperienced.

"In the short period usually allotted to the acquiring of a medical education, at least in this country, it is not to be supposed that a student can enter profoundly into the several branches; still less can it be expected of him to wade through the ponderous tomes and endless periodicals which emanate from the press, and select whatever is useful to be known, and reject that which is not. This task requires more time and attention than he can devote to any single subject, as well as a degree of experience and knowledge which can only be attained by riper years and personal observation. To his preceptors, therefore, the student must look for the means of supplying this deficiency; and especially to those to whom is assigned the important duty of giving public instruction on the several branches deemed essential to qualify candidates for professional usefulness.

"The branch which it is my duty to teach, allow me to say, lacks none of the interest possessed by the other divisions of our science. In improvement, it has kept pace with the rest—in importance, it holds equal rank with any. Entertaining this high estimate of it, it is my purpose, in the ensuing course, to press strongly on your minds the deep necessity of thoroughly comprehending its principles; and to enable you to do so, I shall neglect no means, within my power, of explaining and illustrating the material facts which constitute its elements, so that you may understand and appreciate their importance.

"Beside obstetrics, our course will embrace the consideration of the more important diseases of females and of infants during the month, both of which comprise subjects of the greatest interest.

"The lesions of the female organs, embraced within our range of study, are among the gravest that occur. Often concealed until concealment becomes impossible, the medical adviser is too frequently called only in time to witness ravages which he cannot stay, and to dispel the delusive hopes of a confiding patient. Under more favourable circumstances, however, delicate as is the structure of these organs, the disorders to which they are liable are not less amenable to the resources of our art than those of other important parts. It is especially in this department of our science that the labours of recent observers have most enlarged our knowledge.

"The extensive sympathetic derangements incident to pregnancy are sometimes exceedingly severe, and very seriously affect the health and comfort of the female, and that independently of any appreciable change of structure in the suffering organs. These cases, in various degrees of severity, being of daily occurrence, are frequent objects of the physician's care, and therefore constitute proper subjects for our consideration. One class of these, of which the uterus is the undoubted seat, are especially entitled to our most serious attention;—I mean the mental influences dependent on the irritations of that organ from gestation. The severer cases, in which reason is entirely subverted, alarm at once the friends of the sufferer, and therefore receive the prompt assistance of our art; but it is the slighter rather than the graver forms of these affections, that claim our sympathy and regard.

"That man is but partially instructed in the business of his profession, who looks upon the practice of medicine as an art by which certain physical agents are brought to act upon the purely physical aberrations of the human frame, and is neglectful of those physico-moral influences that modify, and occasionally disorder, the functions of every vital organ, and the not less remarkable reaction of organic disease upon the mental energy and moral responsibility of the individual.

"Of the many causes of uneasiness and family disquiet which tend to embitter the current of domestic life, the most difficult of comprehension to common observers, as well as of correction, are those irregularities of temper and behaviour that result from the derangements of the uterine function.

"To yield to all the follies of a morbid appetite—all the requisitions of an habitual self-indulgence—would be a silly and very culpable weakness on the part of those on whom devolves the duty of administering advice and exercising control; but unquestionably much unhappiness in domestic life occasionally originates from the incapacity of those immediately interested to appreciate rightly the physico-moral failings of the suffering female. The irritability of temper, the unreasonable demands, the vitiated appetite, and various troublesome affections very commonly observed during gestation, and occasionally during temporary derangements of the menstrual function, are but rarely viewed by the young and inexperienced as the evidences of disease. Too frequently, on the contrary, they are looked upon as mere indulgences of self-will, and a vicious disposition. The present, however, is not the time for enlarging further upon this interesting subject. The sympathetic disturbances—the functional derangements which occur—will be fully explained when we come to consider the conditions of the organs from which they result."—P. 21.

MISCELLANEOUS NOTICES.

Pennsylvania Hospital. Dr. Harris and Dr. Edward Peace.—Dr. Thomas Harris, who has long and faithfully and gratuitously afforded his valuable services to this institution, has resigned his office; and Dr. Edward Peace, one of the Surgeons to the Philadelphia Hospital, has been appointed in his place.

On the Alterations which Nervous Fibres undergo after Division. By Professor Nasse, of Marburg.[1]—The results of the lengthened investigations which form the subject of this paper may be briefly stated.

In frogs, the natural average thickness of the filaments of the ischiatic nerve is 0·000416 inch; the majority are much smaller: the filaments of the posterior tibial are of about the same size; those of the brachial rather less, viz. 0·0003835. The smallest size observed was 0·00027 or 0·00028, and this was so common that the author is inclined to believe it to be the true diameter of all filaments unaltered by external influences, or at least of one kind of them. The limits of size were 0·00027 and 0·00045.

The filaments above the division, after it has healed (and usually about five months after the operation), are almost constantly larger than those below it. The average increase of size is 0·00005 to 0·00006.

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[1] Müller's Archiv, 1839, Heft v. p. 405; and Brit. and For. Med. Rev., Oct. 1840, p. 553.

The average size of the filaments which are paralysed by the division is but little different from that of health; many months after the operation they are found only a little smaller. Their decrease in size is greatest when the animal is generally much emaciated; and is greatest of all when the main artery of the limb is divided at the same time as the nerve.

After destroying the connection of a nerve with the spinal cord, its filaments first lose their cylindrical appearance, and from wrinkling acquire a transversely striated appearance, so that they seem to be divided into a number of short pieces. Next, small fat globules form from the breaking up of the medulla, and the filaments become darker and more opaque. Afterwards these fat globules unite into larger drops, and then the walls of the nervous tubuli gradually diminish in their size.

The filaments that form in the substance by which the divided extremities are united are rather smaller than the old ones, but in all respects similar to nervous fibres; their average diameter is 0·000374.

Similar observations made on rabbits had very nearly the same results; but it was remarked, that as in warm-blooded animals generally the nutrition of all the tissues is more under the influence of the spinal cord than in the cold-blooded, so here the destruction of the divided nerves was much more rapid in rabbits than in frogs; and that although kept without food for five months in the most unfavourable season of the year, the latter gave evidence of much more energy of reparation than the former, which were well fed.

Although there was no doubt of new nervous fibres being formed between the extremities of the divided nerves, yet Nasse never found the motion or sensation return in the paralysed limbs, though he sometimes kept the animal for three quarters of a year. He imagines that in the cases in which others have seen such a restoration of power, the divided portions must have been at once placed in exact apposition, so that the filaments could not lose their oily contents; for he clearly determined that the least alteration in the structure of a filament is sufficient to destroy its conducting power.

On Cramp of the Tongue. By Dr. Hoffman, of Suhl.[1]—A person suffering from chronic gout came to me in great distress for my immediate assistance, saying that since the previous day he had had four attacks of such severe cramp of the tongue, that it had been completely rolled inwards towards the frenum. The frenum itself also was extremely painful. During the attack, which lasted from ten to fifteen minutes, he was unable to speak, and could only utter hollow expressions of pain; he felt also considerable constriction of the chest. As he was a full-blooded man, I ordered him to be largely bled, to abstain rigidly, to take nitre with ipecacuan and aconite, and to use as a gargle an emulsion with laudanum. He had only one slight attack after the use of these measures.

Case of Menstruatio Recidiva. By Dr. Petersen.[2]—A healthy woman, aged seventy-nine, was seized on the 26th of March with uterine pains; these lasting a few days, were terminated by a hemorrhagic discharge. On the 23d of April she was again affected in the same way, the discharge appearing on the 25th, and continuing four days. Since that period, (twelve months ago) she has regularly *menstruated.*

[There are several cases on record in which the menstrual periods have been regularly continued until seventy, eighty, and ninety years of age. It has been said (Locock) that such cases are not genuine cases of menstruation, but sanguineous discharges arising from uterine disease. But we have at this moment a lady aged sixty-two under our care, who regularly menstruates without any symptom of uterine disease. A most extraordinary case, similar to that of Dr. Petersen's, is given by Velasquez, of Tarentum, of the abbess of Monvicaro, who, at the age of 100, after a severe illness, had a recurrence of the catamenia; and not only this, a new set of teeth and a fresh head of hair appeared!]

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[1] Medicinische Zeitung, June 3, 1840; and Brit. and For. Med. Rev., Oct. 1840, p. 557.

[2] Bibliothek for Læger, Feb. 1840; and Brit. and For. Med. Rev., Oct. 1840, p. 560.

On the Itch in Adults and in Children. By Dr. Krause, Physician to the Poor in Dantzic.[1]—The chief object of this paper is to prove the inseparable connection between itch and the acari, which many have supposed to be only occasionally present in that disease. The author gives examples to prove, what we believe has not been before noticed, that the disease may exist in those who wash themselves very often, or who have very tough skins, without any eruption; the itching and the power of communication may be present, but no visible sign of the disorder may exist except the burrows of the insects. The following are his cases:

1. A journeyman tailor had three weeks previously slept with a comrade who had the itch. He came to me with a burrow in his left index finger, from which I drew out an acarus, and I then examined him most carefully, but could discover no trace of any further eruption.

2. A servant-girl, the skin on whose hand and forearm was scarcely inferior to leather in colour and thickness, complained of itching in it. By the side of the finger I discovered seven burrows, out of which I extracted three acari; but there was not a pimple or a vesicle to be found on the whole body.

3. A washerwoman, the mother of a numerous family, remarked that her two youngest children were constantly scratching themselves and had an eruption on their hands. She showed me the children, and they had distinct itch, but she denied having it herself; she allowed, however, that she had sometimes felt an itching in the fingers and arms, but she had never remarked any vesicle. This statement was correct, for on the fingers, which had a kind of varnished appearance from the constant action of the hot water and the soap-ley, I could find no eruption, though there were several burrows, from which I pulled out four acari. On further questioning, it appeared that the woman had long noticed these, but had thought nothing of them because there were no vesicles.

There are only two cases, the author says, in which one would not have a right to maintain that itch did not exist, when neither burrows nor acari can be found; namely, quite at the beginning of the disease, and when treatment has been employed for some days and the skin is partially scaling off, so as to destroy the burrows and the acari, but not the brood, which may soon after generate a new eruption.

If one has the luck to draw an acarus by daylight, one may easily be sure of his existence by cracking him on the thumb-nail; he makes a noise just like, though weaker than, that which his near neighbour the fair hexaped makes in the same circumstances. But if one brings him close to the flame of a candle, he bursts with a distinct snap.

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[1] Casper's Wochenschrift, Juli 25, 1840; and Brit. and For. Med. Rev., Oct. 1840, p. 564.

THE

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Philadelphia Hospital, Blockley, November 5th, 1840.

ART. I.—CASE OF CANCER OF THE PENIS.

REPORTED BY WILLIAM M. M'PHEETERS, M. D., RESIDENT PHYSICIAN.

George Dentler, æt. 36, born in the state of Pennsylvania. Until the year 1837, followed the occupation of boatman on the Susquehanna river. In the fall of that year he discovered, on the side of the glans penis, a small speck about the size of a pin's head, which he describes as being firm to the feel, and filled with matter of a yellow colour. For six or nine months it gave him neither pain nor inconvenience, but continued to grow harder and larger—being now about the size of a bean. About this time he consulted a physician, who applied caustic to the tumour. He denies ever having had either syphilis or gonorrhœa. Subsequent to the application of the caustic, he had phimosis, which prevented his exposing the glans penis, or seeing the tumour, which, however, could be felt beneath the prepuce, but gave no pain. The tumour still continued to increase, until it became about half the size of a hen's egg, remaining hard, and discharging a thick yellow matter from beneath the prepuce, when, from undue exposure, the head of the penis became swollen, and of a dark purple colour. In a few days the tumour broke externally through the prepuce, and out of the opening the urine passed, as well as a small quantity of bloody, purulent matter. The urine soon resumed its natural passage, but the tumour remained hard, and discharged a sanious matter. When injured in any way, or when over heated from violent bodily exercise, it would bleed freely. In this state it remained four or five years, at the end of which time he had a severe attack of pleuritis, which, according to his own account, confined him to his bed for more than two months, during the greater part of which time he thinks he was out of his mind. He is unable to say what was the state of the tumour during this period, or whether any thing was done for it or not; but on a return to his senses, the tumour had almost entirely disappeared, leaving an opening in the prepuce, through which the head of the penis could come out. For eight or nine months it gave him but little trouble, when, without any assignable cause, it commenced growing again, sprouting from the margin of the opening, and gradually filling it up. In January, 1839, he went into the Poor House at Harrisburg, where he remained near a year. At the time of his entry, the tumour involved the whole of the penis, with the exception of about an inch next the pubes,—being hard, and having a rough surface. While in this establishment, he was put on a course of mercury, and the vegetable and lunar caustics were freely applied. On the 5th July, of the same year, it ate into a blood-vessel, which bled so profusely as to produce syncope;—pretty soon after this, the tumour itself broke, and discharged a large quantity of purulent matter, and became an open sore. From this time it increased rapidly in size, and soon involved the whole of the penis, the testicles, and the adjoining parts.

March 26th, 1840, he entered the wards of this hospital. At the time of his entry, the sore extended up the abdomen to within two inches of the umbilicus, covering the whole of the hypogastric and the iliac regions on either side,—composed of a number of lobules of irregular size and uneven surface, of a light pink colour, not very sensitive to the touch, and discharging a thick purulent matter, exceedingly offensive. Throughout, his appetite has been good, and he has suffered comparatively little pain, except when some article of food disagreed with him, at which time the sore would swell up and become painful. Since his entrance his treatment has been altogether palliative. During the summer he had an attack of dysentery, from the effects of which he never recovered. Died Nov. 5th, 1840.

Appearances thirty-six hours after death.—Throughout the upper lobe of the right lung a slight deposit of tubercular matter was found, together with strong adhesions between the pleura pulmonalis and the pleura costalis. Heart.—Effusion into the pericardium of about ℥iss of serum, with albuminous patches over the surface of the heart. Liver slightly affected with cirrhosis, but of natural size. A minute injection of vessels of mucous membrane of the stomach; towards the cardiac orifice patches of congestion of the submucous coat, and softening of mucous membrane. Intestines slightly injected, and valvulæ conniventes enlarged. Mesenteric glands of natural size, and unaltered. Kidneys normal.

It was a matter of surprise, in this case, that no appearance whatever of scirrhous deposit was found in any part of the body. It affords a strong example of purely local cancer,—where the disease spends its whole force externally, without in the slightest degree interfering with the more vital functions.

For the American Medical Intelligencer.

ART. II.—ON NEUROPATHIC EXCITEMENT.

BY BENJAMIN R. HOGAN, M. D.[1]

Cambridge, Dallas County, Ala., Dec. 6, 1840.

We are told by high authority in medicine, that the term "debility has slain its thousands;" and it has almost become an axiom, that increased heat and excited circulation of the blood require debilitating or revulsive remedies. Polyæmia or hyperæmia are supposed, erroneously, to exist in all cases of exalted vital actions. The influence of the sentient and motor systems, the cerebro-spinal axis, and the sympathetic, have been overlooked too frequently in the practice of medicine. To the labours of Marshal Hall, Abercrombie, &c., the profession is indebted for the means of a correct diagnosis of many conditions previously unknown. To your own most excellent treatise upon general therapeutics am I indebted for the principles, mainly, that have enabled me to discriminate the condition of neuropathic excitement.

The symptoms of this condition simulate those of power of the vital forces, or inflammation of vital organs. The vital actions and susceptibilities are greatly exalted, there is great impressibility to sedatives, and great tolerance of stimulants.

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[1] Letter from Benj. R. Hogan, late Assistant Surgeon, U. S. A., Cambridge, Dallas County, Ala., to Professor R. Dunglison, M. D., on Neuropathic Excitement.

Neuropathic excitement is developed in individuals of the nervous temperament, whenever the vital energies are innervated to a certain extent, whether it be from defect of nutrition, the sudden or *gradual* withdrawal of a large quantity of blood, or the long continued over-excited state of the sensorium by mental anxiety, or the worn out powers of life in protracted fevers. I have treated it in all conditions of life, and at all ages, from the nursling,

> "Mewling and puking in the nurse's arms,"

to the "lean and slippered pantaloon" of eighty. The symptoms are pain in the top of the head, throbbing in the temples, hot, dry, and shriveled skin,—quick, regular, soft, hard, throbbing, full, small, gaseous pulse, varying in every thing else except frequency, in the course of an hour. Restlessness, heat, thirst,—tongue dry or moist, heavy, soft, clean, or furred, often red at the point, and vesiculated,—sometimes pale, and often semi-transparent. Bowels generally regular, sometimes diarrhœa,—countenance universally pale, and the lips blue or purple. The eye is uniformly bright, unnaturally brilliant in the first periods,—adnata glistening, and pupils most generally dilated, but sometimes contracted. If the condition be not relieved, or aggravated, as is most usually the case, by the administration of *remedies*, to the pain and throbbing in the temples delirium supervenes, *tinnitus aurium*, *subsultus tendinum*, frenzy, and finally, coma and contracted pupils,—involuntary discharges, picking at the bed-clothes, stertorous breathing, and death. Previously, the circulation becomes more and more rapid, from 40 to 100,—the arteries are empty, the veins turgid,—the internal jugular at the inner canthus of the eye is distended, and the countenance deadly pale.

I can better illustrate this condition by reporting a synopsis of a few cases, and the treatment pursued in each:

Case 1.—A mulatto girl, aged about ten years; in the summer of 1835, had a severe attack of congestive fever. Inflammation of the stomach and bowels succeeded. In ten days she was convalescent, viz. all her functions were natural. I directed mild nourishment, and discontinued my visits. In two days I was called to her. Found her with full, hard pulse, beating upwards of 120 in a minute, hot, dry skin, white fur on the tongue, and violent pain in the head. She was bled, cupped, and treated revulsively, without any permanent relief; and in four days she died, with symptoms of effusion on the brain.

Case 2.—In a similar case (same year) of age, sex, race, and temperament, I treated the case in accordance with established principles. The case was neglected for two weeks, during which time she took no mercurial preparation, and she became severely salivated from 10 grs. of Protochlor. Hyd. taken at my first visit. Softening of the uvula and soft palate ensued. For two weeks afterwards she had continued fever,—skin hot and dry, pulse 130, pain in the head, and a dry, hoary appearance of the apex of the tongue. Having almost exhausted the resources of the art on the principle of hyperæmic excitement, white wine whey *ad libitum* was directed for her. Much to my satisfaction, in two hours after the change of treatment, and when about ℥iv of the whey had been taken, I found my patient with soft skin and pulse 100, tongue moist, and all her symptoms improving. The wine was continued and with milk gruel: she recovered rapidly and perfectly.

Case 3.—Mrs. H****, aged 26, of sanguine nervous temperament, had three paroxysms of a quotidian intermittent a week before her confinement with her third child. She had for four years suffered much with dyspepsia, and pain in the anterior lobes of the brain. Her labour was accomplished in fifteen hours, but owing to the shortness of the funis, the placenta was detached with the expulsion of the child, and about ℥xx of blood was lost.

She suffered a good deal from after-pains, and slept but little during the night after her confinement, which took place on the 30th of July.

July 31. About one o'clock became very restless,—skin hot, pulse 130, small and quick,—great thirst, pain in the head, and throbbing in the temples. Direct sulph. morph. ¼ of a grain with 5 grains camph. at 4 P. M. She became tranquil, pulse 120, skin soft, and thirst relieved in an hour after the draught.

Aug. 1. In the morning she was free from excitement, and appearance promising. In the afternoon the excitement returned with increased intensity. To the pain in the head were added *tinnitus aurium* and *subsultus tendinum.*

She took the morph. and camph. and a wine glass of port wine whey every hour.

Aug. 2. The patient became tranquil, skin moist, and pain and throbbing in the temples relieved about 9 o'clock last night. Has taken one bottle of port wine since yesterday. Direct her to take coffee and toast bread for breakfast.

3d and 4th. The paroxysms returned on both these days, with less intensity, and the patient took a bottle of port wine during the period of greatest heat of skin and restlessness. Up to this time she had no action in the bowels, the lochia were moderate, and at the subsidence of the excitement to-night, I thought she would be convalescent. A Seidlitz powder had been administered, and, unknown to me, she had drunk some very strong sassafras tea, for the purpose of increasing the lochial discharge. It certainly had the effect to do so, for she flooded ℥8 or ℥10, and had two alvine evacuations of a healthy character.

5th. The paroxysm yesterday was lighter, and terminated earlier. At one o'clock this morning, after the operation of the aperient and the flow of blood from the womb, my patient became very hot, skin dry and shriveled, pulse 144, small, hard, soft, and tense, varying every half hour. She complained of violent pain in the head, back, and limbs; *tinnitus aurium*, and frenzy succeeded. I was not apprised of the loss of blood, and the symptoms were so alarming, that I hesitated in my course, and feared I had been mistaken in my diagnosis. Until 1 P. M. I did nothing. Then I resolved to bleed. I corded the arm and took about ℥6 of blood. The skin became soft, and the restlessness was relieved. At 8 P. M. there was lethargy, but my patient could be aroused. I applied a cup to each temple, and a blister to the nape of the neck. Not more than ℥i of blood was taken by the cups, but there was great apparent relief. The patient was sensible and conversed rationally, and appeared much relieved. She slept all night, but it was more a stupor than natural repose. Pulse still very frequent.

6th. The blister drew well,—the bowels have acted once or twice a day, the discharges are natural. She is now restless, muttering, speechless, has *subsultus tendinum*, passes her fæces and urine involuntarily,—occasionally there is stertor, the eyes half open, pupils very much contracted,—skin hot, dry, and shriveled,—veins distended, pulse 144. Has had sinapisms applied during the night to the arms and legs, to the number of 10 or 12, to the back and epigastric region.

At 10 o'clock I directed wine to be given. She could not swallow, but it was poured into the mouth by the teaspoonful, and occasionally she would swallow. At 12 there was no change in the symptoms. Peach brandy toddy was substituted for the wine. At 2 o'clock there was not quite so much difficulty of swallowing, and a teaspoonful of the comp. sp. lav. was given every half hour, and the brandy discontinued. At 10 o'clock she became sensible, and at 12 at night she could speak. Strong hot coffee, milk gruel, and beef tea were given occasionally, and wine or peach brandy toddy as often as she would take them. A suppository of opium was administered at 6 P. M. in order to restrain alvine discharges.

7th. She rested and slept occasionally. After 12 last night took nourishment or stimulants every hour. Gave her at 1 P. M. 5 grs. sulph. quin. and repeated every three hours, until it produced a buzzing in the ears. At 12 o'clock to-day she had a sensation of numbness and loss of sensibility. The quinine and stimulants arrested or prevented the excitement that would have followed. They were both continued during the night and next day in smaller doses and portions. At the same hour on the 8th she had the same sensations. After this her recovery has been rapid.

Remarks on the case of Mrs. H.—It was not until the 9th day of August that the pulse receded to its natural frequency, and on this day the bowels were emptied by an enema of soap and warm water.

This case was badly treated. The recurrence of the paroxysms might have been prevented by 15 or 20 grs. of quinine administered at any period during the sweating stage of the paroxysms. The flow of the lochia and the operation of the aperient aggravated the neuropathia under which she laboured. The patient was very near and dear to me, and my feelings were so much interested that I could not rely on my judgment, and I was so situated that I could obtain no aid to enlighten me. The bleeding relieved some symptoms, but only by prostrating the sensibilities of the nervous system. The application of the scarification, by the stimulus of pain, for a time aroused the sensibilities and energies of the nervous system. The arterialisation of blood was effected, and the powers of life were reanimated. There was not enough blood drawn to increase the debility to any marked extent. But during the night, when she slept, the nervous energy was less active,—the blood accumulated in the veins,—nervous congestion in the brain was the consequence. The internal jugular, at the inner canthus, was turgid,—the arteries were empty, and the presence of so much black blood in the cerebro-spinal axis was fast obliterating the remnants of nervous excitability. And not until I despaired of her recovery, and knew I could not obtain the professional services on which I relied, did I adopt that energetic course of stimulation and recuperation of the physical and vital energies, which will alone relieve the pathological condition under consideration.

Case 4.—Mrs. ****, aged 21, sanguine bilious nervous temperament. Had violent pain in her head on Saturday,—was bled about ℥20, and was delivered on Sunday of her third child. Had fever on Monday and Tuesday. Called in a physician, who gave her calomel and Dover's powder,—took a pint of blood from the arm. The calomel was followed by a dose of castor oil, which operated eight or ten times, producing free and copious watery passages. On Wednesday and Thursday complained of great pain in the head and throbbing in the temples. Had hot, dry skin, pulse 140, great restlessness and delirium. When I was called to her at 6 P. M., Thursday, she was speechless, insensible, and picking at the bedclothes,—skin dry, pupils natural, tongue soft with a slight brown fur, pulse 144 and small. She had blisters to the temples and occiput, but recently applied. They were removed at once, and ten drops of laudanum and four grs. camphor given. She took during the night four or five drops of laudanum; after the first portion slept profoundly, and was rational at daylight. Milk gruel and wine whey completed her cure, which was rapid and perfect. On the second day after the wine was given, her pulse became natural. There was about ℥ij of Madeira wine to ℥8 milk, and a wine glassful of the whey was given every half hour or hour. This is usually the method I use in its preparation and administration.

Case 5.—Miss W******, aged 22, of highly nervous organisation, had two paroxysms of a tertian intermittent, and, after the second, took a dose of rhubarb and magnesia. The operation of the medicine produced a chill on the second day. In the pyrexial period I visited her, and found her with purely neuropathic excitement. Complains of violent pain in the top of the head, throbbing in the temples, stinging heat of surface, great thirst and restlessness, pale countenance and purple lips, pulse 120, small and regular, tongue free from nodes, but the papillæ on the apex and sides near it presented a protruded and vesiculated appearance. I gave her 20 drops of the denarcot. tinct. opii, and ʒss. sp. æth. nit., and repeated both in half an hour. In an hour after the first portion, the restlessness and heat were relieved, the pain and throbbing greatly alleviated, and pulse reduced to 110. I now gave her white wine by the half wine glassful every hour, with directions to continue it until she felt its stimulating effects. She took several glasses, and had a perfect recovery.

Case 6.—The Rev. Mr. P****, aged 38, of nervous bilious lymphatic organisation, had gastro-enteritis. I never saw more exalted irritation of the mucous membranes, nor such impressibility of the nervous system. One third of a grain of opium would produce a full anodyne effect.

He was treated revulsively, and in a week all the functions were healthy except those of the circulation and calorification. Pulse steadily at 100, neither full nor hard, but giving the impression of waves under the finger, one beat running into another. Skin hot and dry, with an increase of heat every day at 12 o'clock. Pupils dilated, with injected state of the conjunctiva of the left eye, and flush on the left cheek. I continued revulsive remedies, and repeated general bleeding for the third time. Partial relief for a few hours succeeded the bleeding, but the heat of skin and frequency of the pulse were increased when reaction came on. He slept with his eyes half open, and muttered during his slumber. When awake, manifested a confused perception of himself and every thing about him. Under the debilitating and revulsive plan of treatment pursued, apprehending subacute myelitis to be his disease, his excitement became augmented in intensity and duration. He now complained of frightful dreams, of burning heat in the brain, and thought himself a fireman of a steamboat. His tongue had been perfectly free from sordes for several days, the alvine discharges of a healthy character, and I determined to change my treatment. Accordingly I administered a wine glassful of Teneriffe wine, and repeated the dose every hour. In four hours his pulse receded to 94, his skin became soft, and he fell into a tranquil and refreshing sleep. He slept four or five hours, and when he awoke, complained of great debility. He had never before "felt weak." His excitement returned, and the wine was resumed. He continued taking it when awake, every hour, day and night, for two days, taking Madeira instead of Teneriffe. He improved so rapidly that his friends no longer sat up with him. When he would "over-sleep" himself, or neglect his wine, all his unpleasant dreams and sensations would return. He kept it by his bedside, and after taking two gallons, he began to feel intoxicated from two or three glasses a day. He had a rapid and perfect recovery. He was a *teetotaller*, and when he first took the wine, did not know the difference between Malaga and Madeira.

Case 7.—A negro girl, aged 8 years, had scarlatina,—was convalescent, became anasarcous, with high excitement of the heart and arteries, hot, dry skin. When I first visited her, her skin was hot and dry, pulse 110 in a minute, and full. She was partially deranged, and completely amaurotic,—was under the operation of calomel, had been blistered all over the scalp, the chest in front, and the abdomen. I directed mild poultices to the blistered surfaces, and gave her a teaspoonful of cogniac brandy every half hour. In one and a half hour a bottle of Madeira was at hand. A wine glass of wine whey was directed every half hour, with milk gruel *ad libitum.* I left her at this hour (5 P. M.) At ten at night her skin was moist, pulse soft and natural, and she was rational. At 12 o'clock her sight was restored. The wine whey was continued two or three days, at longer intervals, and she had a rapid and perfect recovery. I saw her two weeks after my first and only visit, and received the above narrative.

Except the first case reported, I have never seen but one patient die with this condition of the system. I was called to see her about three hours before her death, and found her comatose, unable to swallow, with stertorous breathing, and relaxed sphincters. She had been treated for meningitis. Her condition was in all respects like the case of Mrs. E., but farther advanced, when appropriate remedies were administered.

How shall we reconcile with known pathological principles the symptoms of neuropathic excitement and the therapeutic effect of the remedies used for its cure? "It may be laid down as a general principle, that when blood is lost to a considerable amount, the great nervous centres receiving an inadequate, and the rest of the nervous system an irregular, supply of the vital fluid, their excitability becomes largely and irregularly developed; so that under this impressible condition of the nerves, the blood-vessels whose functions are *carried on under their presidency* assume augmented action. And if owing to the previous existence of *hyperæmia* in any organ, the nerves proceeding to that organ are in a morbidly excitable condition, a fresh development of irritability may ensue after bleeding, and the hyperæmic condition, instead of being relieved by the loss of blood, may be augmented by it."—*Vide Dunglison's Gen. Therapeu., Art. Sedatives.* The same morbid condition which is produced by large blood-lettings is induced by the more gradual abstraction of the vital fluid, by purging, lactation, defect of nutrition, &c. &c.

"Some of the most obvious and striking effects of the loss of blood, or those of reaction, are such as to suggest the idea of increased power and energy of the system, and of increased action in some of its organs, and to lead to an erroneous or dangerous employment or repetition of the lancet, when a directly opposite course of treatment is required; while the state of actual but protracted sinking frequently resembles a case of oppression of the brain, or of congestion of the lungs, so accurately, as to prompt the unwary practitioner to a still more sudden and fatal use of the lancet."—*Vide Hall on Blood-letting.* Again, (I quote from the same author,) "I have already stated that the symptoms of reaction from the loss of blood accurately resemble those of power in the system, and of morbidly increased action of the encephalon, and from these causes the case is very apt to be mistaken and mistreated by the farther abstraction of blood. The result of this treatment is apt further to mislead us, for all the previous symptoms are promptly and completely relieved; and this relief, in its turn, again suggests the renewed use of the lancet. In this manner, the last blood-letting may prove suddenly and unexpectedly fatal."

Exhaustion, however induced, will, under certain circumstances, develope capillary excitement. Congestions in the venous system of the encephalon follow, and serous effusion terminates the life of the victim. Effusion in the brain, I believe, is more frequently induced by improper depletion, and the use of the lancet, than from active congestion or inflammation. According to the experiments of Drs. Saunders and Leeds, there is effusion in the brain of serum in all animals bled to death. And if, says Dr. Kelly, "instead of bleeding *usque ad mortem*, we were to bleed animals more sparingly and frequently, we shall find a larger quantity of serum." The diagnosis of this condition is doubtful, and must be drawn from an assemblage of all the symptoms, and a knowledge of the remedies that have been employed, the history of their effects on the patient and morbid manifestations. In doubtful cases, we have often to make a diagnosis upon which the life of the patient depends, and instead of *bleeding in the erect posture*, as recommended by Marshall Hall, or the use of the more potent and permanent stimuli, I have generally given in doubtful cases a combination of camphor, morphine, and nit. æther, in such small portions as to act energetically, but transiently. In the first periods, from augmented impressibility of the nervous system to sedatives, one fourth or even one eighth of a grain of morphine produces decided sedation. In the last periods of venous congestion, coma, and relaxation, the clear state of the adnata, stinging heat of the surface,—the pale countenance, blue lips, and distended veins, and rapid, variable, and almost empty condition of the arterial contractions, will at once, to the experienced practitioner, indicate the condition.

Maugre the objections of therapeutists to wines and distilled spirits as stimulants, because they act with accumulated intensity, I find them more efficacious in this condition than any other. Ammonia, in adynamic, neuropathic or exsanguious conditions, often produces profuse perspiration, and aggravates the condition it was intended to relieve. In the reaction of collapse, or the collapse of typhus, I generally alternate them. If the wine produce too much excitement, with dry skin, ammonia is given. If the perspiration become profuse under the administration of the ammonia, wine is substituted with the happiest effects.

For the American Medical Intelligencer.

ART. III.—ON THE EFFECTS OF OPIUM IN BRONCHITIS.

BY ALFRED T. KING, M. D.

Greensborough, Pa., Dec. 2, 1840.

To Professor Dunglison, M. D.

Dear Sir,—There are but few books which I have read with so much pleasure and profit as your Elements of Therapeutics, a work which I believe should be read and studied by every student and practitioner of medicine. The value of any medical work must be estimated by the lucidness and precision with which it indicates a correct system of practice; and the truth or the falsity of any doctrine or views promulgated by a medical writer can only be correctly tested by actual trial and repeated experiment. And in this manner have I again and again tested the correctness of your views, and the practical value of your pathological and therapeutical deductions. I allude more directly, in these remarks, to your views, as stated in the work above mentioned, in reference to the *modus operandi* of opium in phlegmasiæ, particularly in the phlegmasiæ of the bronchial mucous membrane.

Opium, in all its forms, has been usually proscribed during the inflammatory stage of diseases, and in none more than in bronchitis and pneumonitis. It has been alleged, in support of this view, that it always diminishes secretion and exasperates inflammation. This is doubtless false. You mention what is almost a self-evident truth, that "the first effect of high inflammatory excitement in a mucous membrane is to diminish its wonted secretion, and after the inflammatory action has existed for a time, an increase of its secretion takes place; but it is no longer healthy. The obvious indication is to remove this pathological condition of which these effects are only symptomatic. Now, a narcotic in an appropriate dose we know to be sedative, and capable of diminishing the force of the circulation and the energy of innervation." This reasoning struck me as extremely plausible, if not correct; and I determined that I would put it to the test the first favourable opportunity. It was not long ere an opportunity offered itself, and I need not add that the experiment was entirely successful. Many cases have since occurred in my own practice, in which the effects of this giant remedy were no less remarkable. A case, indeed, recently presented itself, in which a large dose of opium appeared to check the disease like a charm. This case I shall briefly describe:—

Mrs. S., of hale constitution and sanguineous temperament, was attacked October, 1840, suddenly, with great dyspnœa, accompanied by wheezing, an incessant cough, at first without any expectoration, but after a time the expectoration became copious, pain in the breast, and high inflammatory fever. Percussion,—Slight dulness under the right clavicle, in every other part the chest was resonant. Upon applying the stethoscope, the sonorous and mucous râles were very distinct over the whole of the right lung, particularly the former râle. Under the left clavicle, over a space of about three inches, the crepitating râle was very perceptible. The sonorous râle, also, was very distinct in the upper part of this lung. Was there inflammation of the parenchymatous structure of the lung where this crepitating râle was heard? This I considered an unequivocal case of bronchitis, complicated with tubercles, probably, under the right clavicle, and a slight pneumonia. I accordingly bled, purged, cupped, and administered antimonial solution, with some relief to the patient.

As I resided about fifteen miles off, I was unable to see my patient for some days. About three days after the first visit, a messenger came in great haste, and desired me to go immediately with him. He said Mrs. S. was but little relieved, that she coughed almost incessantly, and had not slept since I was there. I had some urgent business to attend to that afternoon, which prevented me from going immediately with the messenger. Here, I thought, was a favourable opportunity for trying again the effects of opium. I accordingly sent Mrs. S. 3 grs. of denarcotised opium, with directions for her to take one half immediately, and if it did not give relief in one hour, to repeat the other half. This she did as I directed. The next morning I saw her, and was astonished to find her breathing with comparative ease, and she had little or no cough. She told me that soon after taking the second part, she began to breathe more easily, the cough ceased, and she fell into a tranquil slumber, from which she did not wake for six or seven hours, and then with almost perfect relief from her distressing cough and impeded respiration, with which she had been harassed for nearly a week.

With much respect, I am yours truly,

Alfred T. King, M. D.

BIBLIOGRAPHICAL NOTICE.

Dr. M'Clintock's Introductory Lecture.[1]

This is a well written and well conceived address. Few lectures of the kind have come before us which are entitled to more commendation, or which present fewer occasions for criticism. The following extract, in relation to the advantages of anatomical knowledge to the surgeon, is a specimen of the author's matter and manner:

"In former times, when surgery held no elevated rank in relation to general science, the operative surgeon left to the physicians the difficult and laborious work of examining and understanding the bodily organisation; and the former were content to be the mere agents or assistants of the latter. But, in reading the history of medicine, you will find that this second-hand knowledge was inefficient; that the art was rude and cruel, compared with its present perfection; and that its practitioners held no higher rank than the knights of the razor, who performed, indeed, in many cases, the honourable and useful duties of the twofold profession, of barber and surgeon. As anatomy began to be cultivated, however, and the surgeon devoted more attention to it, the art began to rise in dignity and importance; and now, when every practitioner is supposed to be thoroughly informed in that science which contains the elements of his art, that art itself is second to no human employment in the excellence of its objects, the elevation of its character, and the dignity of its reputation.

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[1] Annual Lecture. Introductory Lecture to the Winter Course of Anatomy in the Philadelphia School of Anatomy, delivered on Monday evening, Nov. 2, 1840. By James M'Clintock, M. D., Lecturer on Anatomy and Surgery, one of the Physicians to the Philadelphia Hospital, &c. Published by the Class. 8vo, pp. 16. Philadelphia, 1840.

"A very slight glance at the former condition of surgery, as contrasted with its present perfection and glory, will satisfy you of the truth of these remarks. Twenty-three hundred years ago flourished Hippocrates, the Father of Medical Science, who, like Homer and Raphael, in their respective arts, not only created this science, but brought it to a high degree of perfection, by the impulsive force of his genius, and the unwearied energy of his research. So accurate were his experiments, and so profound his observations, that he unfolded the history of acute diseases with so much clearness and precision, that twenty centuries have hardly detracted from the value or added to the amount of his researches. But he was far from attaining the same degree of perfection in surgery. And why? Because the circumstances with which he was surrounded,—the prejudices of an ignorant and superstitious people, and their religious veneration for the asylums of the departed,—by depriving him of the opportunity of dissecting the human body, raised up insurmountable obstacles to the proper study of anatomy; and his knowledge of the subject, founded chiefly upon the external appearance of the body, and on the examination of the structure of those animals which were supposed to approach nearest to man, was necessarily limited and imperfect. In the study of acute diseases, commonly occurring, which presented strongly marked symptoms, and only required a just and sagacious observation of their succession and relations to each other, in order to the formation of a correct history of them, these imperfect notions were sufficient; but in surgery, the want of anatomy was immediately felt, and the consequence was that the science, even in the hands of so great a master, made little or no improvement. And it remained in its infancy for nineteen hundred years longer, until, in the beginning of the sixteenth century, the genius and boldness of Vesalius gave new life to anatomy. The darkness that had so long hung over surgery was soon pierced by the new and brilliant light which the advancement of anatomy diffused over all branches of medicine, and under the illuminating power of this clear and certain flame, the art soon assumed a new aspect, and suddenly rose to a high pitch of perfection in the hands of Ambrose Paré, the distinguished surgeon of Charles IX. whose great and well deserved reputation saved his life in the memorable night of the massacre of St. Bartholomew. To this day, the countrymen of Paré claim for him the same high place among surgeons that is assigned to Hippocrates among physicians. And among all the great names that adorn the history of surgery in later times, the Petits, the Desaults, the Le Drans, the Munros, the Hunters, the Coopers, and the Physicks,—you will not find one, the foundation of whose high renown was not deeply laid in the study of anatomy; here they prepared themselves for those successful operations which made them the admiration and wonder of their own times, and for those brilliant discoveries and inventions which have transmitted their glory undiminished to ours,—nay, which shall crown every one of these honoured names with the immortal reward of an imperishable fame.

"There is no quality more indispensable to the surgeon than that undisturbed coolness of mind which cannot exist without a strong and just confidence in his own powers, and in his preparation for the arduous task before him, when he is called upon to perform some important operation. This just self-confidence is essential to every pursuit in life. To quote the language of Bulwer, "If you rob genius of its confidence, you clip the wings of the eagle." No great enterprise in the walks of science, literature, art, or business, has ever been accomplished without it; it nerves the arm of the warrior, it gives energy and power to the decisions of the statesman, and it enables the scholar to struggle on, through years of unceasing labour, with full hope of the final reward of all his toils. But to the surgeon, of all other men, is this calm confidence and self-reliance indispensable. He is called to the side of a wounded man—life is fast ebbing away—his judgment must be almost as rapid as his eyesight, and his action must follow, as rapidly, the decisions of his judgment, or the patient will die in his hands. Now, under such circumstances, a man must either be thoroughly ignorant of anatomy, or fully learned in it, in order to have confidence in himself. I can imagine the former confidence, that of the quack, who knows nothing of the wonderful mechanism of the human frame, and of course is ignorant of the dangers that lie before him, to be as strong as that of the skilful anatomist, who comes to his task, not only fully aware of all the dangers that attend it, but also furnished with the knowledge necessary to avoid or obviate them; but surely, gentlemen, it is not requisite to warn you against the ignorant, reckless foolhardiness of the one, while I hold up to you, as the object which you should aim at and pursue with unwavering perseverance, the well grounded self-reliance of the other. Nor, after the remarks that have been made, is it hardly necessary to say to you, that the surgeon who is possessed of only an outline knowledge of anatomy, will have no pretensions to the just confidence in himself which the thoroughly furnished operator can indulge; while, on the other hand, his knowledge of the structure and constituents of the body will be sufficient to make him tremblingly alive to every danger, and to fill his mind with the most harassing apprehensions. Most sincerely is such a man to be pitied for his miserable condition, but most heartily is he to be despised for the inexcusable carelessness and indolence that have brought him into it. Behold him, standing over his patient faltering, hesitating, disconcerted: hardly knowing where to apply his knife, and certainly ignorant of the results of its application,—in the language of John Bell—'trembling at the thought of what he has to do,—acting only as he has seen others act,—he is interrupted, startled, perplexed with every new occurrence. He has foreseen nothing, provided for no accident, and every accident alarms him. He moves fearfully and timorously onward; like a blind man who walks with an air of confidence on an accustomed road, but when any new object presents itself, or the road is changed, is bewildered and lost.' 'Such operators are seen agitated, miserable, trembling, hesitating in the midst of difficulties, turning round to their friends for that support which should come from within, feeling in the wound for things which they do not understand, holding consultations amidst the cries of the patient, or even retiring to consult about his case while he lies bleeding in great pain and awful expectation; and thus, while they are making ungenerous struggles to gain a false reputation, they are incurring reproaches which attend them through life.'

"What a picture is here! Nor is it overcharged, gentlemen, as you may have learned already from observation,—I hope you never may from experience. Let it sink into your hearts, and be thoroughly impressed upon your memories, and it will effectually prevent your placing yourselves in such a false and unhappy position. As you would not dare to risk your own life in the hands of any surgeon whom you thought not thoroughly skilled in anatomy,—so may you never rashly undertake to trifle with the lives of your fellow-men, by undertaking to perform dangerous operations upon them without this indispensable preparation. Every man who loses a patient under such circumstances and for such reasons, is morally responsible for the life of his victim,—for *victim* he is, to the stupidity, the idleness, or the carelessness of the man to whom he entrusted his life. May you never incur so fearful a responsibility! Now more fearful than ever, because the means of improvement in anatomical knowledge are placed within your reach, and nothing but patient perseverance and industry are necessary on your part in order to secure it."—P. 11.

MISCELLANEOUS NOTICES.

A Paper on Diseases of the Skin. By C. N. Berkeley, M. D.[1]—The present state of our knowledge of diseases of the skin presents a striking contrast with that of other affections, both medical and surgical. While pathological investigations have been pursued with interest, and daily additions thus made to accurate diagnosis and treatment of disease in almost every form, affections of the skin, the most palpable lesions of the system, and those most evidently challenging the notice of the practitioner, have in this country been so much neglected, as in part to be thrown out of regular practice, and consigned to the care of empirics. Reasons for this are offered, such as the comparative infrequency of occurrence of cutaneous diseases, the habit of domestic treatment in their mild forms, and their intractable nature when brought to the physician in the chronic or inveterate stages, &c. But, perhaps, a better excuse may be found in the difficulties supposed to attend their study, from the want of systems of classification and nomenclature adapted to these diseases as presented in the United States. There is certainly much weight in this; for, besides the objection on the ground of the expense of importing the French and English works, the diseases they describe differ so much in variety and extent from those occurring with us, as to offer strong difficulties in the way of a just comparison, thus rendering these works of less practical value than their intrinsic merits would indicate.

These difficulties may be obviated, we think, at least for practical purposes, by assuming some plan, based upon the classifications of foreign writers, which shall embrace most of the diseases they describe, with those of our own country, but so arranged as to correct in part the confusion of a multiplicity of synonymes, and at the same time indicate the general nature of each class and variety of disease. Such a plan is now offered,—not to the scientific inquirer, who will, of course, refer to the authors themselves from whose works it is partly drawn,—but to the student whose opportunities do not permit access to them, and to the practitioner whose engagements will not allow him the time necessary for their study and comprehension.

To establish a classification on a strinctly *scientific basis*, we should assume for it the anatomical lesions and pathological phenomena of the diseases to be arranged. This has been attempted in those of the skin, but with little success. To comprehend the difficulty of such a plan, we must investigate the special anatomy of the skin: we give it very briefly, as demonstrated by Messrs. Breschet and Roussel de Vauzeme. According to their observations, the skin consists of—1st, the *dermis*, enveloping the capillaries, the lymphatics, the nervous filaments, and the parenchyma of other organs contained in its substance.

2d. The *papillæ*, or organs of touch, the extremities of the nervous filaments.

3d. The perspiratory apparatus, or organ of secretion and excretion of perspiration.

4th. The apparatus of inhalation, or absorbent canals.

5th. The apparatus producing the mucous matter.

6th. The apparatus producing the colouring matter.

Some doubts exist as to the accuracy of these investigations, since Chevalier under similar circumstances arrived at very different results; still we will assume them as nearly correct, some such organisation being necessary to account for the various functions of the skin. Our object in bringing them forward is to show the almost impossibility of establishing a pathological arrangement of cutaneous diseases,—that is, of assigning to each of them a cause, and a location in an abnormal condition of one or the other of these tissues. How could inflammation exist in the perspiratory apparatus without involving that of inhalation and absorption; or how could the minute vesels of the mucous tissue be affected without implicating those of the colouring matter? for the space occupied by each of these systems is so small as to defy detection with the naked eye, requiring the assistance of the most powerful glasses to render them evident to the senses. Daily experience shows the impossibility of inflammation existing in one or the other organ of the skin for a considerable time without extending to those adjacent. Thus, in eczema, the most common vesicular affection of the skin, the first and simplest form presents a slight elevation of the cuticle, filled with clear serum, and apparently without inflammation; a degree farther we find a partial change in the character of the serum, and evidences of inflammation, as in eczema rubrum. Still farther, we have the serum entirely altered, becoming purulent, and covering the surface with scabs, as in eczema impetiginodes, which soon becoming pustular, presents a genuine impetigo. The same condition prevails in scabies, which, if neglected, at different periods of its duration exhibits every variety of cutaneous disease, from the simple vesicle, its type and origin, to the severest forms of pustular and papular affection, followed by universal desquamation. These facts illustrate the position assumed, and warrant, we think, an attempt at some simpler and more practical classification.

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[1] Medical Examiner, January 2, 1841, p. 5.

In the following plan a distinction is drawn between syphilitic and venereal cutaneous affections; this is not the proper place to give the reasons for such a distinction. Syphilis is used to express *chancre* and its *special* consequences; *venereal* implies all other diseases, the results of *impure coition*, not dependent on chancre. We propose to follow Plumbe in part, arranging cutaneous diseases under two general divisions. First, those of local origin, or dependent on the skin alone: second, those of a constitutional character, produced by some cause affecting the general system and developed through the skin.

First Division.—Diseases of the skin proper, or those originating in the skin, independent of, though modified by, constitutional causes.

Pustular Diseases.

Synonymes.				
Varus	Acne	A. mentior sycosis—probably contagious.		
Gutta rosea		A. punctata	Generally chronic	Non-contagious.
Dartre pustuleuse		A. syphilitica		
Couperose		A. indurata		
Copper nose		A. sebacea		
Couperose		A. rosacea, acute		
Tinea-Teigne Favus P. lupinosa	Porrigo	P. favosa	Contagious when originating as porrigo around the bulbs of the hair; when consequent on impetigo, probably non-contagious, though followed by permanent baldness in the affected part.	
Ringworm		P. scutulata		
Agria Scabies fera Furunculi Atonici	Ecthyma	Non-contagious; sometimes complicated with syphilis; chronic.		

Vesicular.

Dartre squammeuse Humid tetter Running scall	Eczema	E. simplex, or solare, closely anologous to lichen tropicus, or prickly heat	Non-contagious.
		E. rubrum,—often periodical; usually the origin of chronic E. in debilitated constitutions	
		E. impetiginodes,—apt to lose its vesicular form, and become impetigo	

VESICULAR.				
Synonymes				
Itch Psora-gale Rogne	Scabies	Generally acute and contagious; when chronic, it loses its vesicular character, and becomes either pustular, squamous, or papular; in the latter form closely resembling prurigo senilis. Scabies is produced by the acanus scabei.		
SQUAMOUS.				
Scabies sicca Dartre furfuracée arrondie Dartre ecailleuse Dartre squammeuse lichenoide Dry scall Scaly leprosy Scaly tetter	Psoriasis	P. guttata P. labialis	Generally acute	Non-contagious.
		P. circinnata, or lepra P. diffusa P. inveterata P. preputialis P. palmaris, grocer's or bakers' itch	Chronic	
Dandriff Dartre furfuracée volante Lichen	Pityriasis	P. capitis—chronic		Non-contagious, and rarely the subject of medical treatment.
		P. versicolor P. rubra	usually acute	
Fish-skin disease	Icthyosis	Chronic and non-contagious.		
BULLOUS.				
Ulcus Atonicum	Rupia	R. simplex; acute and non-contagious.		
TUBERCULAR.				
Herpes exedens Lupus vorax Dartre rongeante	Lupus	L. exedens L. syphiliticus L. non exedens	Non-contagious.	
Cancroide Keloide	Cheloidea	Chronic and non-contagious.		
MACULÆ.				
Mother mark Spilus Mole	Naevi	Naevi vasculares.		

SECOND DIVISION.—Diseases produced by causes acting through the constitution.

PUSTULAR.				
Crusted tetter Dartre crustacée Running tetter Melitagre	Impetigo figurata Imp. sparsa	Porrigo larvalis Tinea mucosa Crusta lactea Teigne Dartre crustacée flavescente	Non-contagious, and frequently salutary in its influence, especially in children, during the summer and winter.	
	Venereal and syphilitic	The most common form of venereal and syphilitic cutaneous affection.		
Glanders Farcy glanders	Equinia	E. glandulosa—acute glanders Farcy glanders, generally chronic	Contagious.	
VESICULAR.				
	Eczema	E. of the scalp, confounded with porrigo Chronic E. E. of the face, mistaken frequently for crusta lactea, or impetigo	Non-contagious, and perhaps salutary.	
	Syphilitic & venereal	Very rare—chronic		

VESICULAR.

Synonymes.				
Tetter Dartre Olophlyctide	Herpes	H. phlyctenodes H. labialis H. preputialis H. zoster H. iris	Generally acute	Non-contagious.
		H. circinatus,—evanescent ring-worm, liable to become chronic		
SQUAMOUS.				
	Syphilitic eruptions	Unconnected with other forms of cuatneous disease, and perhaps entirely dependent on constitutional syphilis.		
PAPULAR ERUPTIONS.				
Papula Scabies sicca Gall leche Dartre furfuraçée volante	Lichen	L. simplex L. strophulus—red gum L. urticatus L. agrius L. syphiliticus—generally of venereal origin	Acute—non-contagious.	
Pruritis Cresmos Scabies papuliformis	Prurigo	P. mitis—acute		
		P. formicans P. senilis P. podicis P. genitalium	Generally chronic and non-contagious; in the form of P. senilis, perhaps salutary, especially in females, after their "change in life."	
	Syphilitic	Generally result of constitutional syphilis.		
EXANTHEMES.				
Essera aspretudo Nettle rash Purpura urticata Febris urticata Exanth-urticatum	Urticaria	U. febrilis U. evanida U. tuberosa	Chronic generally	Non-contagious.
Intertrigo Tooth rash Gum	Erythema	E. fugax E. papulatum E. nodosum	Acute—non-contagious.	
	Erysipelas	Acute Chronic	Non-contagious; sometimes epidemic in hospitals.	
Rose rash Rosacea Rubeola Spuria	Roseola	R. infantalis R. annulata R. aestiva R. autumnalis	Acute and non-contagious.	
		R. syphilitica	A primary affection, usually coincident with gonorrhœa; at times chronic.	
MACULÆ.				
Land scurvy Petechia Peliose	Purpura	P. simplex P. hæmorrhagica	Acute—non-contagious.	
		P. syphilitica	Acute and chronic; perhaps purely of syphilitic origin.	
Liver spots Tâches hepatiques Chloasma	Ephelis	Generally chronic; non-contagious; apt to accompany pregnancy, and retire with its cessation.		
BULLOUS.				
Febris bullosa Pompholyx Dartre phlyctenoide confluente	Pemphigus	P. acute Pomphol-solitarius	Acute	Non-contagious.
		Pomph-diutinus—chronic pemphigus		

Bullous.			
Synonymes.			
Ulcus atonicum	Rupia	R. prominens R. escharotica R. syphilitica	Chronic; non-contagious.
Tubercular.			
	Elephantiasis	Chronic—non-contagious.	
	Syphilitic tubercle	Generally of syphilitic origin—chronic.	

Unclassified Diseases.

Frambœsia
Mollusum
Lepoides
Melanosis

Furuncle	Not properly a disease of the skin, but of the sub-cutaneous cellular tissue.
Scrofula	Incapable, perhaps, of originating, yet complicating and modifying all the diseases embraced in the second division.

Variola, varioloid, and vaccina; varicella, with military fever; rubeola and scarlatina, are omitted. With the exception of vaccina, they are essentially fevers, and belong to works on general practice. Vaccina, if classified, would be considered as confined to the skin proper; it is not introduced on account of its intimate relations with variola.

Stokes on the Chest.—A copy of this work, sent to us by its distinguished author upwards of two years ago, has, from accidental circumstances, only just reached us. Messrs. Haswell & Barrington have, we are informed, some copies of the English edition for sale.

Philadelphia Medical Society.—At the annual election held on Saturday, 2d January, the following officers were elected for the ensuing year:—

President.—Thomas Harris, M. D.
Vice Presidents.—George B. Wood, M. D.; Robert M. Huston, M. D.
Treasurer.—J. Brewer, M. D.
Corresponding Secretaries.—B. H. Coates, M. D.; W. Poyntell Johnston, M. D.
Recording Secretary.—Joshua M. Wallace, M. D.
Orater.—Isaac Parrish, M. D.
Librarian.—J. F. White, M. D.
Curators.—Joseph Peace, M. D.; John B. Griscom, M. D.

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Art. I.—CASE OF SEVERE COMPOUND FRACTURE.

BY S. T. NEWMAN, M. D.

St. Francisville, La., January 4th, 1841.

Dr. Dunglison,

Sir,—If the following case is worth a place in your journal of medicine, it is at your disposal. Respectfully,

S. T. Newman.

On the 24th of February last, I was called to visit Esther, servant-girl, living six or eight miles from Amsterdam, Miss. The girl, I was informed, had broken her leg. When I arrived I found her suffering extreme agony; and upon removing the covering which had been thrown over the affected limb, my sensibilities were shocked at the mangled appearance it presented. I found instead of a fracture (which I expected to see,) a luxation of the joint, made by the foot on one part, and the tibia and fibula on the other, in which the foot was almost torn from the leg; it being torn from the external malleolus upwards and across the instep, down to the tendo achillis; this tendon, however, was not injured. The accident occurred in the following manner: the girl was sitting on the axletree of a wagon, with her legs hanging carelessly down; while in this situation the wagon was driven over a stump, and she not observing it, permitted her foot to be caught between the stump and the axletree. The consequence was, that as the leg was pushed forward and the foot held back, the tibia and fibula were forced through the capsular ligament, tendons, and integument, externally, to the distance of nearly two inches, while at the same time the surrounding soft parts were contused and lacerated (by the cutting edge of the stump) to a wonderful extent. It was the left limb that was implicated, and notwithstanding the foot was driven toward the external malleolus, with a force that will be easily conceived of, yet the tibia and fibula did not lose their attachment, contrary to what might have been expected, when we take into consideration the manner the fibula is allied to the astragalus, so as to form the external malleolus.

The extent of the injury was such as to induce me to think that amputation would be proper. Before modern improvements in surgery, amputation would have been looked upon as inevitable. But bearing in mind the precepts inculcated by Professor Dudley on this subject, viz. that a surgeon ought to be indictable for a high offence who would deprive a person of a limb of so much importance as either of the extremities, save where the injury is of such a nature and extent as to preclude the possibility of restoration, which he thinks rarely happens;—and recollecting, too, the statement of Mr. Hennen, that it is more honourable to the surgeon to save one limb than to have performed numerous amputations, however successfully:—actuated by these considerations, and ascertaining that there were uninjured vessels sufficient for the nourishment of the foot, and that the girl was also healthy and of good constitution, I determined to make an effort to save the foot; for which purpose I had as suitable an apparatus made as circumstances would admit in which to place the leg. Then having a permanent bed prepared, I set about adjusting the injury. Making a black man (for the overseer of the plantation was absent, and I could, being in the country, get no other assistance,) take hold of the leg so as to steady it, I gradually extended the foot until (with other manipulations which suggested themselves,) I returned it to its place, which, in consequence of the injury the muscles had received, it was not disposed to retain, until forced to do so by splints and a roller, lint being applied over the wound to absorb the secretions. I should have remarked, when describing how the parts were torn, that there was less hemorrhage than might have been expected, the hemorrhage indeed amounting to almost nothing. I now adjusted the limb in the apparatus previously prepared, and leaving further directions to be followed during my absence, I left, for I could not await the time of bleeding.

Visited her early on the 25th. Found she had passed a miserable night. Bowels regular, pulse full and somewhat incompressible. Bled her until the activity of the circulation was reduced. Dressing not removed. Prescription: antimonial powders to be taken during the day, and an opiate at night.

26th. Visited her in company with my friend Dr. Hansford. Upon removing the dressing, the wound presented a very unfavourable appearance. Sanies discharged in large quantities. After washing it with tepid water and Castile soap, dressed it with dry lint, supporting it as before. Pulse strong and somewhat bounding. Abstracted blood to affect the general system. Prescription unchanged.

27th. Visited her again with Dr. H. She complained less of pain, but upon inspecting the wound, so unfavourable were the appearances exhibited, that Dr. H. and myself were fearful it would be incurring too much risk to the constitution to defer amputation. There was considerable sloughing both of muscles and tendon. Large quantities of sanies were discharged. We determined, however, to wait a day or two, to see what nature would do. The wound was cleansed, and emollient poultices applied, to be reapplied at proper intervals.

28th. The wound but little altered. Treatment the same. For the next two or three days there was not much change in appearance; the tendons and muscles continued sloughing. Discharge of matter enormous, but becoming more healthy in appearance. Dead portions of muscle and tendon were from time to time removed, and in the course of a few days appearances of granulations were seen. I continued my visits until the 11th March, and up to this time the wound bore as favourable an aspect as could have been expected, reparation going on in a decided but slow manner. At this period I delivered the girl up to her master, Dr. Joseph Jones, of Vicksburg, who had been absent, but returned to Vicksburg about this time, and visited his plantation immediately upon hearing of the accident. I cannot describe the progress of cure after 11th March, but at this time (September 12), the girl is able to walk about and attend to plantation service. She limps considerably, which in the very nature of things must always be the case, as the joint must ever remain partly anchylosed.

S. T. Newman, M. D.

ART. II.—ON PATHOLOGY OF THE JOINTS.

[We extract the following article, being "a Succinct View of the Present Condition of Knowledge on the Pathology of the Joints," from the last (Oct. 1840) number of the British and Foreign Medical Review,—being a critical notice of the works of Sir B. Brodie, R. Adams, J. Blackburn, L. H. Schumer, and E. J. Lederle.—ED.]

1. *Diseases of the Synovial Membranes.* The synovial membranes are arranged on the same general plan as the serous, forming, like them, closed sacs. That they pass over the surfaces of the cartilages can no longer be a subject of doubt, since, in addition to the previous strong and almost sufficient evidence in favour of that view, Henle has found, with the microscope, that a fine cellular corium, covered by a delicate layer of epithelium, passes over the exposed surface of all the articular cartilages.[1] There is undoubtedly, also, "some analogy in the diseases" of the synovial and of the serous sacs; but it is far from perfect; and on the very first point which Sir B. Brodie mentions (p. 7), that of "swelling of a joint from a preternatural quantity of fluid collected in its cavity, without pain or inflammation," we find an important difference between the two. The dropsies of serous sacs are of two distinct kinds: in one the fluid passes out from the vessels by a power which is entirely local, by an act of secretion; in the other it transudes from them under the influence of simple mechanical pressure, which may be imitated at will by artificial injections, or its excessive effusion is the consequence of some physical change in the condition of the blood. In the first class of effusions we find the effects of pleuritis, peritonitis, and, more definitely, hydrocele; in the second, the ascites of obstructed partial circulation, and the more general dropsy of obstructed circulation from disease of the heart, in which anasarca of the cellular and other soft tissues coincides with effusion into the serous sacs.

Now the synovial sacs are subject only to the first kind of effusions; to those which arise from a local secretory power. It has often been observed as a distinction between serous and synovial membranes, that the one is commonly, the other never, the seat of simple dropsical effusions, and the difference has usually been ascribed to some yet unseen diversity of tissue, or to a yet more vague peculiarity of vital action. We believe that the cause of the distinction lies in neither of these circumstances; but in the peculiar construction of the cavities which the synovial membranes line, and in the difference between them and most of those that are lined by serous membranes. As the blood passes along the vessels in healthy circulation, just sufficient fluid transudes through their walls to keep the adjacent tissues and surfaces slightly moist; but if the pressure of the blood against the walls of the vessels be increased by any obstacle to the passage of venous blood, or (which comes to the same thing) by an increased force of the arterial blood without any increased means for its passage through the veins, more fluid must of necessity pass through the walls of every vessel that is not supported by the unyielding pressure of some firm substance around it. In all the soft and easily extending tissues, therefore, and in all the cavities with yielding walls, dropsy is thus at once produced, the force of the obstructed blood being amply sufficient to distend those parts. But it is different with the hard tissues and the unyielding cavities, such as the cartilages, the tendons, the cerebro-spinal cavity, and the joints; in these no mechanical dropsy (such as arises from disease of the heart) can take place, for the same force by which the fluid is effused in increased quantity in the parts already mentioned, is totally unable to distend them. Hence, though all the tissues around them are soaked in fluid, no tendon or cartilage is ever anasarcous in a general dropsy; and this not for want of vessels, but because the walls of those vessels are bounded by unyielding tissues into which fluid could transude only under a far greater force of pressure. For the same reason, while in similar cases the abdomen and the pericardium are distended, and the lungs are compressed by the fluid effused from the obstructed vessels within and around them, the nervous centres in their cavity of fixed and unalterable size, and the joints with their tough, unyielding walls, are unaffected.

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[1] Ueber die Ausbreitung des Epithelium. Müller's Archiv. 1838, Heft 1.

The dropsies of synovial sacs, then, are entirely the result of a local act of secretion; they correspond to hydrocele, and to the effects of pleuritis and peritonitis, &c.; but there are no affections of the joints analogous to ascites or the coincident effusion from obstruction into other serous sacs. In passing, we would point out these facts as illustrative of the difference between secretion and mere mechanical effusion: and of the varieties of the forces by which, under different circumstances, fluids are made to pass through the walls of vessels. The force of secretion is in these cases shown to be sufficient to produce, in a few hours, such a distention of a joint as could not have been effected in as many years by the force of exudation exercised by an obstructed column of blood driven on even by an hypertrophied heart.

But this affection, this hydrops articuli, in which an increased quantity of fluid is poured into a joint without pain or inflammation, and in which the fluid differs but slightly from common synovia, is of rare occurrence. The more frequent cause of effusion of an increased quantity of fluid into a joint is a distinct inflammation of the synovial membrane.

On reviewing the cases of this class which Sir B. Brodie relates, as well as those that have fallen under our own observation, it is evident that, as subjects of morbid anatomy, the changes produced by this inflammation present peculiarities of two kinds,—one depending on the peculiarity of the tissue itself, the others on that of its construction and arrangement. The latter have been by no means sufficiently considered, though they are of great importance in explaining some facts which, at first sight, appear anomalous.

As the subject of disease, the synovial membrane cannot be abstractedly considered. Regarded as a homogeneous thin layer of tissue lining the whole joint, it is yet evident that both in health and disease the performance of its functions must be materially influenced by the character of the tissue subjacent to it, and from or through which it receives its vessels. Sir B. Brodie (page 6) states it as a principle to which all will agree, that "living organs are more subject to have their natural functions deranged in proportion as they are more vascular, and as they are employed in a greater degree in the process of secretion." But the degree of vascularity in the synovial membranes of different joints, and even in that of the same joint, is by no means fixed; the same membrane where it lines the articular cartilage is far less vascular than where it lines cellular tissue or fat; less vascular, again, where it is placed on ligament than where it lies on bone or periosteum. The liability to inflammation, and the severity of the results of the same inflammation of a synovial membrane, will therefore be determined, not by a certain vascularity peculiar to itself (as they are in muscle or in bone), but by the vascularity of the tissues beneath it; for the vascularity of the various portions of the synovial membrane is determined by that of the tissue through which each receives its vessels.

We might illustrate this principle of the influence of subjacent tissues upon the diseases of lining membranes by several examples; but we will take only one, that of the inflammation of arteries and veins. The lining membrane of the whole system of blood-vessels is continuous, and in all its parts similar, whether we receive the older view of an internal thin layer of cellular tissue, or the correct demonstration of Schwann, that it is chiefly composed of fibres of elastic tissue, in which, if any, a longitudinal direction is discernible, and whose surface is lined by a fine epithelium.[1] In either case the linings of the arteries and veins may be considered identical. Yet how different are their diseases. Acute arteritis is one of the rarest affections, but acute phlebitis is of comparatively common occurrence. And in the effects of each there is no less marked a difference; in arteritis the highest degree of inflammation produces only a slight effusion of lymph or adhesion; while in phlebitis, suppuration, and the abundant formation of lymph, are common and almost constant effects. There seems no other sufficient reason for such a difference in the results of the same disease in two tissues of the same kind than this,—that in the one the tissue receives its vessels from a surrounding very vascular layer of cellular membrane, in the other from a layer of elastic tissue, in which vessels are but just demonstrable; and that in each part its own vascularity is directly proportioned to that of its subjacent tissue.

Other examples of a similar kind will at once present themselves to the reader's mind. To apply the principle which they establish to the affections of the synovial membrane: The tissues on which it is placed might be arranged according to their vascularity in the following order: adipose and cellular tissue; bone and periosteum; tendon and ligament; fibro-cartilage; articular cartilage; and as a general rule (to which, however, certain local circumstances will cause individual exceptions,) we think it will be found that the morbid changes of the several parts of the membrane lining these tissues, both in severity and frequency, follow the same series.

When, for example, we examine an old diseased knee-joint, in which the history shows that inflammation commenced in the synovial membrane, we do not find its whole lining equally affected; but by far the most severe results of the disease are seen on the portions beneath which adipose tissue is placed, as above and by the sides of the patella; here it is most thickened, most spongy, most vascular, and covered by the greatest quantity of lymph; on the periosteum around the edge of the cartilage, and on the front of the crucial ligaments, similar effects are much less in degree; and on the surface of the cartilages they are altogether absent. But the synovial membrane is over all these parts, *per se* the same; and there is every reason to believe that all of it is simultaneously and equally attacked by the disease; so that there can scarcely be any other cause for the differences than the different natures of the subjacent tissues.[2]

In like manner (though in the determination of this result there must be many more modifying circumstances), we believe that the comparative frequency of disease of the synovial membrane in different joints, depends in great measure on the degree of vascularity of the tissues by which the walls of each joint are formed. In none is the disease so common as in the knee-joint, and no joint has more of its synovial membrane in contact with adipose tissue; next to the knee in this respect may probably be placed the elbow, and here again a considerable quantity of loose and vascular tissue surrounds the joint; while in the hip, where there is a complete and dense fibrous capsular ligament, with the low degree of vascularity peculiar to that class of tissues, primary disease of the synovial membrane is by comparison of very rare occurrence. Sir B. Brodie regards the exposure to cold as the chief cause of the frequency of inflammation of the knee-joint, and Mr. Adams partially coincides in that opinion; the influence of cold cannot be denied, but its sufficiency may be doubted when the disease is far more rare in the wrist and ankle, which are more exposed to cold than the knee, but a greater portion of whose contour is occupied by fibrous tissues.

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[1] Encyclop. Wörterb. des Medicin. Wissenschaften. Art. Gefässe. His view is confirmed by Gutenberg, Raeuschel (De Arter. et Venar. Structura), and Henle, (Ueber die Ausbreitung des Epithel. Müll. Arch. 1838), though in some measure contradicted by Valentin, (Repertorium, &c.)

[2] By this explanation, too, the chief objection urged against the presumed passage of the synovial membrane over the cartilage is destroyed; if the cartilages themselves are obscure in their manifestations of disease, so must be the membranes which are so intimately connected with them, and which receive from them a great part of their vascular supply.

These circumstances, then, which are often regarded as anomalies, namely, the varied frequency of common inflammation of the synovial membrane in different joints, and the varied degrees of its severity, as exhibited in its products, in different parts of the same joint, are, we believe, fairly explained by the different degrees of vascularity possessed by the surrounding subjacent tissues, from which the synovial membrane receives its vessels. We may now proceed to the diseased appearances whose peculiarities are more probably referrible to the nature of the synovial tissue itself.

The effect most commonly and often permanently left by inflammation of the synovial membrane is thickening. This differs from the analogous change produced in a serous or mucous membrane, by the parts being less dense and firm; the thickened part is soft, and easily tears; it has a spongy œdematous character; its free surface, instead of being smooth and polished, acquires a delicately granulated or almost villous aspect, not unlike that of a granular conjunctiva; and at the edges of the cartilages it often overlaps them, just as a chemotic conjunctiva overhangs the margin of a cornea.[1]

In this condition the tissue of the membrane undergoes no material change; it is only swollen by the effusion of serous fluid, and usually of lymph, into its areolæ, which, if the affection be not complicated with other articular diseases, are often rapidly removed after counter-irritation or other means. There is another state which possesses some, though an obscure, relation to this simple thickening, but which is much more serious in its nature. Sir B. Brodie regards it as a change peculiar to the synovial membranes of joints, and belonging to the same class with tubercle, carcinoma, &c.

"The morbid action evidently originates in the synovial membrane, which loses its natural organisation, and becomes converted into a thick, pulpy substance, of a light brown and sometimes of a reddish-brown colour, intersected by white membranous lines. As the disease advances, it involves all the parts of which the joint is composed, producing ulceration of the cartilages, caries of the bones, wasting of the ligaments, and abscesses in different places." (p. 79.)

This form of disease is that which Dr. Lederle, with most of the German writers, describes as fungus genu, and to which he applies the extraordinary appellation of "dynamico-vegetative pseudoplasm." It is also one (and if they understood any thing definite by the name, the especial) form of disease described by the old writers as white swelling. We are inclined to think that it is more commonly an effect of simple chronic inflammation of the membrane than Sir B. Brodie regards it; its most common situation, the knee, is that in which the synovial membrane is far most frequently inflamed; its history is often that of protracted inflammation; the shades between it and common thickening are so numerous, that they are scarcely separable; and it does not, like other specific or malignant diseases, affect either the same tissue in different parts, or different tissues coincidently. Further pathological investigation is still necessary on this subject; the interest of which is the greater because the disease in its advanced stages admits neither of cure nor alleviation; and if it be in any case the result of the neglect of a more simple disease, its prevention should of course be the object of much greater care than is usually bestowed on common stiff joints.

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[1] In this, as well as in many other circumstances, in both their natural and morbid structure, one cannot but be struck with the closeness of the analogy between synovial membrane and the conjunctiva. The comparison was first made by W. Hunter, who was, indeed, in this part of his descriptions, singularly felicitous; witness the famous comparison of the serous sacs to double nightcaps.

In thickening of synovial membranes, serum and lymph are effused in the areolæ of its tissue, and very generally in the adjacent parts, which become hard, tough, and unyielding, lose all their power of sliding upon one another, and in some cases form an almost homogeneous, brawny, infiltrated mass, in which the dissector has difficulty in discovering even those things that in health are among the most prominent. At the same time lymph and serum may be secreted on the free surface of the synovial membrane and into the cavity of the joint. The effusion of lymph, however, is on the whole less frequent in the synovial than in the serous sacs; a circumstance in which again they appear in some measure intermediate between serous and mucous membranes. The lymph may form adhesions between the opposite surfaces of the membrane; for adhesions are the result of inflammation, not of any particular tissue, but of all tissues which are so arranged as to present two surfaces sufficiently near each other to permit the lymph effused upon one to adhere to that upon the other, and thus in one mass with it to be organised. Where this arrangement is wanting, whatever be the tissues inflamed, it is evident no adhesion between them can take place. In the synovial sacs adhesions are on the whole less frequent than in the serous; probably in consequence of the little power which some of the tissues composing the former possess of producing or receiving new vessels. Thus, suppose lymph effused on the surface of a synovial membrane, opposite a cartilage; the chance that the cartilage will either produce or receive new vessels to communicate with those that form in the lymph is but slight. But there are only a few parts of the joints in which the synovial membrane covering one tissue is not opposed to that covering cartilage, and the adhesions that do form are generally found in these parts, as, for example, where the synovial membrane of the wall of the joint is opposed to its own reflexion over the bone. Hence, in the knee, the frequency of the cases in which the cavity of the articulation is obliterated above the patella, and at the sides of the condyles of the femur, and round the head of the tibia. The cases are rare in which adhesions pass the surface of the synovial membrane covering the cartilages; but they occasionally happen, and are, we think, more common in the ankle than in any other joint. There are several specimens of the kind in the College of Surgeons; and we have seen more than one in which a distinctly vascular adhesion passed from one cartilage to the other without having any connection with the more vascular parts of the synovial membrane lining the walls of the joint; evidence which alone affords as good proof of the vascularity of cartilage as most *facts* in medicine are based upon.

The next degree of the effects of inflammation of the synovial membrane is suppuration. It affords a good example of the production of pus without ulceration; though the doctrine of suppuration from a sound tissue has lost its verbal truth since Henle proved the existence of a synovial and a serous epithelium, and rendered it probable that before pus-globules can be produced from a membrane's surface, the epithelium cells must be removed. The pus is therefore produced from the *raw* surface of the synovial membrane, just as it is from the cutis when its epidermis is removed. The production of pus, like that of dropsies in synovial sacs, is by a process of secretion, which overcomes all the resistance of the walls of the joint, and often distends them to an enormous size. In this case there can be no doubt of the propriety of Sir B. Brodie's advice that the fluid should be let out by an opening made into the joint; the sufferings which the patient endures from an otherwise irremovable and still increasing collection of fluid distending all the tissues around it, at once declare the necessity of the measure. He limits the practice to these cases; and except in considerable collections of pus, we cannot but doubt the propriety of cutting into a joint.

Yet there are many good practitioners who do not hesitate to adopt the same means in many other cases, under the idea that the inevitable anchylosis will be accelerated. Their arguments for this practice, however, seem to furnish their own contradiction; it is true that anchylosis often follows the wound of a healthy joint, and so does death sometimes; but, say they, the opening of a diseased joint is very different from opening a healthy one,—it produces no ill effect, and may be done with perfect safety. But if it produces no ill effect, will it produce anchylosis, which is the most common ill effect that follows it when performed on a sound joint? For what are the obstacles to the occurrence of anchylosis in the common course of the disease which the operation removes? We believe none—unless the opening lets out such a quantity of fluid as was sufficient to separate the surfaces that should adhere. For osseous anchylosis to take place, the cartilages must be removed and the bones exposed; granulations must arise from each of them, and uniting, become osseous; if pus, or any other fluid, keep the granulations apart and prevent their union, it should undoubtedly be removed; but if not, the process will go on as plainly as the union of a simple fracture, and, for aught we can see, it would be as wise to pass a lancet between the ends of a broken bone, under the idea of accelerating their union, as to open a joint not full of pus, in the hope of accelerating its anchylosis.

If the pus be not artificially removed from a joint, it will slowly make its way out by ulceration through one of the spaces between the dense tissues of the walls, or if the joint have a capsular ligament, through the meshes of its fibrous fasciculi. The aperture first forms where the resistance is least, in accordance with common physical laws; the fluid pressing equally in all directions, distends, and produces its injurious effects most rapidly where the parts are weakest. The artificial opening of the distended joint is thus the more advantageous, because it is a rare coincidence in which the weakest is at the same time the most dependent part; and a naturally formed opening will seldom be placed so as to permit the the fluid to pass off by it rapidly enough to keep the joint empty. Thus, in the knee, openings most frequently form at the sides by the lateral ligaments; or in front, just by the sides of the ligamentum patellæ; or if they form behind, it is too often by the pus creeping through a long and tortuous course, in the ham and down by the heads of the gastro-cnemii. An artificial opening may of course be made wherever the patient's position and other circumstances render it most desirable; cæteris paribus, that which Sir B. Brodie recommends, in the most depending part, will be the best.

That important morbid condition in which pus is simultaneously deposited in a number of joints is still, as to its pathology, most obscure. Scarcely any advance has been made in our knowledge of it since Mr. Arnott's admirable paper on Phlebitis was published in the Medico-Chirurgical Transactions. Of its frequent coincidence with phlebitis there can be no doubt; but it is far from proved to be a consequence of it: on the contrary, cases are not wanting in which the venous system, though carefully examined, has been found quite sound. On all connected with these cases much more evidence is yet required; and it is to be hoped that their explanation will be one of the first practical results of the microscopic observations on pus and suppuration, which are now occupying so many active minds, but have as yet been lamentably barren of profitable results.

In the natural progress of disease, the pus formed in a joint will pass out of it by ulceration; it is much more rare for it to pass from without inwards, and by ulceration to produce perforation of a joint. But such cases (though as yet, we believe, almost undescribed,) do occur, and they are perhaps the most terrible, in their symptoms and progress, of all the diseases that affect the joints; for they are equal to the ulcerative perforations of the serous sacs in their rapidity of local progress, and though less quickly fatal, are even far more painful than they are. Happily the conditions in which they can occur are but few; they are only those in which a collection of pus is formed in some tissue adjacent to a joint, and is prevented from making its way externally by some dense unyielding substance between it and the surface of the limb. This is sometimes the case when the head of a bone is necrosed, or has a suppurating cavity formed within it; as the fluid increases, and the bone around it is removed, it may at last perforate the joint through the ulcerated cartilage, and the destruction that follows it is alike rapid and painful. More rarely, an abscess formed externally to the joint opens into it at some part where the synovial membrane is guarded by weaker tissues than those which lie superficially to the pus, and in these cases, also, a rapid destruction of cartilage, with intense inflammation of the synovial membrane, and the most acute suffering, are sure consequences. Amputation, which the severity of the symptoms at once demands, probably affords the only prospect of recovery.

We have considered the several degrees of the affection of the synóvial membrane separately, because it is of the utmost importance in their treatment to know that in the early stages of disease of the joints only this part may be affected, and that, therefore, the limb may by timely and proper care be restored to complete health. Sir B. Brodie particularly insists on the necessity of knowing what the early conditions of these diseases are, before they have proved fatal to the limb or life by involving all the tissues adjacent to that primarily affected. It is probably from lack of opportunity of observing these early changes, that nearly all writers but himself describe the affections of joints as so complex, and so rarely isolated in any one of the tissues composing them. This is in some measure the case with Mr. Adams, who, though not denying the probability that the diseases of a joint may commence in any one of its tissues separately, yet refuses to take advantage of the evident distinctions that might be founded on that fact, and writes of inflammation of the hip-joint (*arthritis coxæ*) in general, distinguishing only the three forms of acute, strumous, and chronic rheumatic inflammation; and of the diseases of the knee-joint, under the general name of arthritis genu, distinguished only into acute, simple chronic, chronic rheumatic, and chronic strumous arthritis. This, however, is depriving morbid anatomy of much of its practical benefit. To be sure, when we get a diseased joint to look at, it is in general only when it had ceased to afford any hope of ever being useful to the patient, and when he is either dead or maimed; and then, no doubt, we may find the ravages of synovitis, chondritis, osteitis, and many more such enemies, as formidable in nature as in name; but we should remember that there probably was a time when there were fewer to contend with; that all these crept in one by one, each establishing himself on the ground near that which was already occupied by one of his allies. If any thing is to be done for the cure of this class of diseases, it must be attempted before many of the tissues are affected; the chances of benefit are always inversely to the number of those terrible *ites*, and the more separately we consider them all, the better shall we be prepared to combat with each.

[To be continued.]

Medical Institute of Louisville.—The annual catalogue of this institution gives the names of 205 students now in attendance. Of these there are—from Kentucky, 70; Tennessee, 50; Alabama, 21; Indiana, 19; Mississippi, 17; Ohio, 8; Missouri, 5; Illinois, 4; Arkansas, 4; Georgia, 2; South Carolina, 1; Virginia, 1; New York, 1; Texas, 1; Iowa, 1.

Geneva College, New York.—The annual catalogue has the names of 136 matriculates attending during the present session.

ART. III.—REPORT OF AN OPERATION FOR THE REMOVAL OF A LARGE BONY TUMOUR, CALLED "SPINA VENTOSA OF THE SKULL."

BY GEORGE M'CLELLAN, M. D.

Professor of Surgery in the Pennsylvania Medical College.

[The following article, which appeared in the January number of the American Phrenological Journal, ought not to belong exclusively to the phrenologists. It is certainly equally interesting to the unbeliever in the "science;" and is well worthy of attention in its surgical relations.—ED.]

Early in the month of December, 1838, Thomas Richardson, a resident of the city of Pittsburg, called on me for surgical aid. He was then twenty-two years of age, and had been afflicted about three years with a tumour upon the vertex of his skull. About six months before the first appearance of the tumour, he received a severe blow from a missile on the affected region, after which he occasionally experienced tenderness and pain there. As the tumour gradually increased, it produced a determination of blood to the head, attended with a sense of fulness, and a giddiness on stooping. But he was not deprived of any intellectual power; nor were any of his sensations or muscular actions disturbed.

The tumour was very hard and unyielding, and had been pronounced to be an *exostosis* by every surgeon who had examined it. It was oblong in shape, being four inches in the long, and three and one fourth in the short diameter. It was raised in the centre about one and three fourth inches above the surrounding portions of the outer table of the skull, and extended from about an inch beyond the sagittal suture on the right side obliquely to the left, and backwards over the adjacent portion of the left parietal bone. It occupied, phrenologically, the organs of firmness, self-esteem, approbativeness, and a part of cautiousness, on the left side.

I was induced to undertake an operation for extirpating this tumour, chiefly because no symptoms of cerebral affection could be discovered other than those which a moderate determination of blood to the head might produce. Two long incisions were first made at right angles near the centre of the swelling, and afterwards the scalp was dissected up from the whole surface, and, to some extent, around the sound bones. With a long, narrow saw, held in a tangent to that portion of the circumference of the cranium, I then cut off the entire tumour, apparently at its base. The saw moved with difficulty while it was passing through the external table, but with great ease when it was acting upon the interior of the mass. This first led to the suspicion that the disease was not an *exostosis;* and when the prominence had been removed, it was made evident that a far worse state of things had to be encountered. The exposed surface presented perpendicular cells, or cavities, like those of a honeycomb, which were filled with a bloody, or pulpy and sanious matter. The case was at once decided to be a *spina ventosa* of the skull, and it was therefore deemed necessary to extract the whole mass from the surface of the dura mater beneath. A long and tedious extension of the operation was then undertaken. The whole mass of the tumour was circumscribed by the circular edge of a small Hays's saw, and the mass was pried out in successive fragments by an elevator, occasionally aided by the bone nippers and forceps. This part of the operation proved exceedingly difficult, for the tumour extended inwards much deeper below the internal table, than its outer surface had risen above the external table of the skull. Finally, however, a removal of the whole morbid structure was effected, and the dura mater was exposed, thin and livid in appearance, at the bottom of a deep cavity which the bystanders estimated to be capable of holding four and one half ounces of water. There were no pulsations visible, although the circulation was strong and full. Some small spiculæ of bone adhered to the dura mater, which were extracted by the aid of forceps. In extracting the last of these, which appeared to penetrate the dura mater, a prodigious gush of venous blood issued, after which the patient fell into a convulsive syncope. The hemorrhage was supposed to proceed from the longitudinal sinus, and was therefore arrested by graduated compresses and a bandage. The angles of the wound were brought as near together as possible over the compresses, for the purpose of affording support to them while they were confined by the bandages. Very little irritation resulted from this operation.

In nine days the compresses were loosened by suppuration, and, on removing them, the whole of the exposed surface was found to be granulating, and the orifice in the great sinus was closed. But the brain had not risen up to occupy the exposed cavity; and it was found impossible to place the flaps of the scalp in contact with the dura mater in the usual way, so as to close the wound. Mild dressings of patent lint were applied over the surface, and confined with moderate pressure by means of a double-headed roller. On the twelfth day after the operation, the cavity below the bone was evidently diminished, and every day thereafter it continued to decrease, until, in the fourth week, the surface of the brain covered by the granulating dura mater had risen up to the level of the inner table. The natural pulsatory motions did not appear, however, until the cavity was nearly filled; and, in the mean time, forcible pressure could be made on the surface of the brain without exciting any degree of stupor or inconvenience on the part of the patient. But as soon as the pulsations began to appear, every kind of pressure proved irritating to the brain. At the same time, a remarkable change took place in the character and bearing of the patient. He then became exceedingly timid and irresolute. It would render him pale and almost pulseless to approach him with a pair of scissors for the purpose of trimming away his hair from the margins of the wound; and the sight of a piece of lunar caustic, or a pair of forceps, in the surgeon's hands, would throw him into great trepidation. This state of his mental faculties continued for a long period after his complete recovery from the wound. He could not even go down into a cellar containing some plaster busts without a sense of faintness and sinking; and the operation of taking a cast of his head in plaster nearly prostrated all the functions of his mind and body. His carriage also became remarkably affected. Instead of retaining his natural erect posture and bearing, he sunk his head and shoulders into an awkward stoop, and looked timidly and anxiously forward, as if he was afraid of blundering against a door-post.

At the time of the operation, and until the pulsations of the exposed portion of his brain returned, he was remarkable for his firmness of mind and resolution. No patient ever bore a severe and protracted operation with more intrepidity. He sat upright in a chair, without any confinement, until the blood-vessel gave way at the close of the operation; and during its performance, he repeatedly inquired of the bystanders if it was the brain which was coming out under the efforts of the surgeon. It has been, moreover, stated by those who have known him well for years, that previous to this injury he had always been distinguished for his firmness, courage, and independence.

He is now (two years after the operation) living in perfect health at the Exchange Hotel, Pittsburg. He is engaged in active business, and is entirely exempt from any symptom of a return of the disease. His former firmness and intrepidity of mind have been gradually returning for a year past, and at present no departure from a healthy condition of mind or body can be discovered. A thickening or induration of the flaps of the scalp, which resulted from their long exposure and separation from the subjacent dura mater, and which at one period gave origin to a report that the disease had reappeared, has become entirely softened down and attenuated, by the natural process of absorption.

As this case occurred during the period of Mr. Combe's first course of lectures in Philadelphia, it excited great attention among all phrenologists. One of the gentlemen who attended the operation addressed a letter to Mr. Combe, stating that both organs of firmness were lost or destroyed; and asked for an explanation of the apparent contradiction in the conduct of the patient to the principles of phrenology. Mr. Combe read this letter publicly to his class, and endeavoured to explain away the difficulty, by locating the position of the tumour posteriorly to the organs of firmness. On a further and subsequent examination of the wound, however, he decided that a great portion of the skull over the region of firmness had been removed, together with that of several of the neighbouring organs, as I have enumerated them.

In no respect, however, does this case militate against the principles of phrenology. The organs, instead of being destroyed, were merely displaced or depressed by the growth of the tumour, in the same way that deformities are produced in some of the savage tribes by gradual pressure of the skull. Perhaps a better analogy may be drawn between the state of these organs and the parts of the brain pressed upon by internal effusions of blood, and depressed fractures, which do not produce the symptoms of compression. A compensation is then made for the space occupied by the effused blood or depressed bone, by a corresponding amount excluded from the cavity of the vessels, and retained in the general circulation.

A careful examination of this case will, I think, elicit observations in support of phrenology. The tone and excitement of the depressed region of the brain must probably have been increased by the invasion of the tumour, on the same principle that the muscles of labouring men are sometimes supported by leathern straps and bandages. On the other hand, the extirpation of the tumour must have had the same effect in removing the tension and mechanical support of the organs, as tapping for abdominal dropsy exerts upon the viscera of that great cavity. As soon as the depressed convolutions began to be unfolded or distended by the pulsation of the blood-vessels, they experienced a want of that pressure which had before stimulated them into an increase of activity. Their tone then became enfeebled, and continued so until the scalp had contracted adhesions to the outer surface of the dura mater, and the cicatrix became consolidated, so as to afford a firm and counteracting support to the pressure of the circulation below.

While Mr. Richardson was recovering from the operation, he was visited by several phrenologists, for the purpose of establishing the precise location of the wound. Although they differed in their opinions in regard to the degree in which the organ of firmness was involved, they all agreed that self-esteem was affected, and some thought the injury extended also to the organ of concentrativeness. Inquiries were therefore directed by them to the manifestations of these faculties; and the patient did suggest some points of character in relation to which he conceived he had undergone an alteration. He asserted that he had for a long time previous to the operation lost his self-respect in the presence of company, and his power of confining his mind to any particular train of thought. But these peculiarities were not obvious to me, or to any of his familiar friends; and I have not thought it right to put them down in my estimate of his condition, as affected by the operation. Such affections may have been the result of that confusion in the mind which generally accompanies excessive determination of blood to the head. It has been suggested that they were produced by a paralysis of those organs which were most severely depressed by the deepest portion of the tumour; while, at the same time, the convolutions which lay under the edges of the tumour, and were only slightly pressed upon by it, were stimulated into increased activity of their functions. I will leave the decision of this point, however, to more experienced phrenologists, trusting that the facts which I have here given will be judged of according to their merits.

BIBLIOGRAPHICAL NOTICES.

Dr. Robinson on Delirium Tremens and Insanity.[1]

We are glad to receive this report from its estimable author. It is creditable to his literary and professional qualifications; and contains—what is always interesting to us, and especially so at the present time—an eloquent appeal in favour of the insane poor, whose condition appears to be as deplorable in Maryland as it is in this commonwealth.

Dr. Robinson has done us the honour to cite from our "second appeal," which we intend to insert in the "Library," as we did the former appeal, inasmuch as it contains facts and arguments that may be of service hereafter.

In the treatment of his cases of delirium tremens, Dr. Robinson's experience does not exactly accord with our own. Emetics, especially of salt, he has found of great value, when given at an early period, and we doubt not that they are often of service; but we cannot subscribe to the mixed opiate and alcoholic treatment which he advises. We had occasion recently to mention, that the cases must be few indeed in which alcohol is indispensable; and from a comparison of statistical results, we are satisfied that the number of thorough cures is not as great where alcohol is freely given as where it is withheld or administered with exceeding caution. When Dr. Robinson affords us a tabular view of the results of both modes of treatment, and establishes the superiority of the alcoholic, the opiate, or the mixed method, we shall bow, but not until then. But we need not repeat the views which we entertain on this matter, as they are familiar to our readers.

We extract the philanthropic appeal of the author to the people of the state of Maryland on the subject of a state asylum for the poor lunatic, and are glad to see so able an advocate of his claims on the commiseration and justice of the community.

The gentlemen of the board of trustees of the Baltimore Alms House, anxious to ameliorate the condition of the lunatic inmates, and convinced of the impractibility of instituting such a moral and physical treatment as is best calculated to restore them to health, unless in an asylum exclusively devoted to the insane, have already called the attention of the city and county authorities to the necessity of some more appropriate disposition of them, and have directed a few additional apartments to be prepared for their present accommodation. We are pained to acknowledge the inevitable necessity we have sometimes experienced, from the crowded condition of the cells and the large number of lunatics, of treating our delirium tremens patients in the immediate vicinity of, if not in the same apartment with, insane patients.

Seventy lunatics are now confined in this alms house alone. Twenty white males; thirty white females; seven black males; thirteen black females; besides twelve idiots. A portion of these are foreigners; some are individuals from other states, and some from other counties of this state, who find their way or are sent to Baltimore wholly unprovided for, and consequently have no other asylum but the alms house.

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[1] Report of Cases of Delirium Tremens occurring in the Hospital of the Baltimore Almshouse, with Observations; to which is added an appendix comprising an Appeal on Behalf of the Insane Poor of Maryland. By A. C. Robinson, M. D., one of the Attending Physicians. 8vo, pp. 47. Baltimore, 1840. (From the Maryland Medical and Surgical Journal, vol. 1.)

The whole number in the state of Maryland, including those confined at private houses, and such as continue immured in the county poor houses and jails, will soon be reported by the marshal. If the proportion to the entire population approximate that in other states, the new census will show a large class of indigent beings, afflicted with a malady now known to be curable in the proportion of ninety per cent. of recent cases, under an early and judiciously directed physical and moral treatment. Yet the sufferers, whose only crime is their poverty and disease, are treated as if unworthy of sympathy; forgotten in their prison-houses, where they are allowed little beside "the poor privilege to breathe," chained like convicts, or associated with vagrants, as was formerly the case in all parts of Europe, as well as in every portion of the United States, when, under the errors of a false philosophy and the force of prejudice, insanity was viewed as an infliction, the attempted removal of which was deemed idle, if not presumptuous.

When will Maryland arouse to the necessity of following the benevolent example of most of her sister states, in providing some suitable asylum for her insane poor,—where they may enjoy those comforts and conveniences, those occupations and amusements, which are acknowledged to be indispensable to alleviate, if not to cure? In such an asylum, how many would be restored to "mental existence" and usefulness, whose hallucinations are now aggravated,—the disordered functions of their brains goaded to excess, resulting in organic change and permanent fatuity, by being uncomfortably kept in crowded apartments, subjected, perhaps, to some form of personal restraint to protect them from each other; deprived of the benefits of exercise, amusement, and occupation; a condition as well calculated to induce insanity in a healthy individual, as to render it perpetual when once manifested.

Science and philosophy have triumphantly proved the curability of insanity, if attended to early; and the people of Maryland cannot continue deaf to the claims of this most unfortunate class of her citizens, and refuse to aid their escape from the justly dreaded deprivations of permanent insanity, and consequent confinement in the comparatively comfortless apartments of poor-houses, and the ill-ventilated, grated, and cheerless cells of county jails, identified with felons and vagrants.

Will Maryland allow herself to be longer—now almost half a century—behind France, Italy, and England; indeed nearly all Europe, and many years behind Maine, Massachusetts, New Hampshire, Vermont, Connecticut, New York, Virginia, South Carolina, Tennessee, Kentucky, and Ohio, in the good work of providing for her pauper lunatics? Will she still allow them to remain shut up, two, three, four, or more, together, without even the poor consolation of being alone in their misery?

The destitute condition of the insane poor of our state is, in truth, a dark blot upon her otherwise fair escutcheon, which, we trust, will soon be removed. Instructed by the experience of her sister states, that on the score of economy it is her interest, we hope she will follow the clear dictates of policy, if not of pity, and no longer refuse to make proper provision for this class of her citizens.

Bountifully providing for the destitute widow, orphan, and invalid, for the mute and the blind, can she permit her soil to continue one of the few spots where the poor lunatic is forgotten amidst her public charities, and left destitute of the comforts of existence, and every means of mental tranquillity! We hope not. But regarding the very partial provision made two years since, in 1837–8, by the appropriation of $30,000 to the Maryland Hospital[1] as an earnest of her future disposition and efficient action, we fervently pray that at an early day an asylum and a home may be given by the state to every destitute subject of mental disease within her limits.

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[1] On the 3d of April, 1838, a resolution, offered by Dr. Stephen Collins, a delegate from Baltimore city, passed the legislature of Maryland, in favour of the Maryland Hospital, by which $30,000 were appropriated for its completion,—distinct reference

An eloquent appeal has again been made in behalf of the insane poor of our sister state, Pennsylvania, which we doubt not will prove effective, so well is it calculated to re-enlist the active sympathies of her enlightened philanthropists in behalf of those who are no longer regarded, and should be no longer treated, as outcasts. Her chief magistrate, as her organ, in withholding his sanction (the necessity of which he deplored, but thought imperious, from the exhausted condition of the treasury,) from a bill making provision for the numerous insane poor of that extensive commonwealth, which was passed by the legislature two years ago, has avowed it to be her religious duty to provide, at her earliest ability, for the removal of so manifest an evil from amidst her people. And it being now shown to be her interest on the score of economy[1] alone, Pennsylvania, we are sure, will not

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being had, in making the improvements, to its exclusive use as a *Lunatic Asylum*. This resolution contains the following clauses: "*Provided*, that one half of said institution shall hereafter be appropriated to the accommodation of pauper lunatics of this state, who shall there be accommodated and treated at the expense of the county so sending such lunatic paupers; provided the same shall not exceed one hundred dollars for each pauper lunatic so sent."

This appropriation has proved totally insufficient to supply the necessities of the pauper lunatics of the state. Their number is estimated at not less than two hundred and fifty. The sum of one hundred dollars, to be paid by the counties to the hospital, is too small to bear expenses. It has been stated by Dr. Steuart, President of the Maryland Hospital Board,—a statement corroborated by the reports of the most economically conducted institutions at the north,—that the food, nurse-hire, medical attendance, and medicines of each patient costs one hundred dollars; and that clothing and fuel would cost twenty-five dollars additional. This loss the institution bears out of the small profits derived from the private patients.

It seems, however, that the counties very seldom avail themselves of this provision, preferring to continue their unfortunate lunatics in their poor-houses or jails, at an expense calculated not to exceed fifty dollars, with scarcely a chance afforded of recovery,—rather than incur the additional expense imposed by placing them at a hospital appropriated to the insane; where alone, if not restored to health, their condition may be so improved by a judicious course of moral government, seconded by cheerful exercise and healthful occupation, as to render them once more comparatively contented and useful. By this ill-judged economy, insanity is aggravated, and the sufferers continue during life totally helpless and dependent. Whilst, had their home been at a lunatic asylum, their moral, mental, and physical capacities would be so directed as to be conducive to their individual support, simultaneously with the improvement of their health and condition.

According to the census of Maryland for 1830, there were 291,108 white persons; 52,938 free coloured; 102,994 slaves;—total population, 447,040.

The census of Maryland for 1840 is not yet completed. From data supplied by the marshal, the number of insane, mutes, and blind, are estimated as follows. (The returns are evidently but partially correct.)

Number of insane and idiots at private charge, 193 whites, and 92 coloured.
" " " public " 127 " 72 "
" deaf and dumb, 157 whites, and 67 coloured.
" blind, 153 whites, and 82 coloured.

Two counties, Carroll and Caroline, not included in the above.

[1] See a Second Appeal to the People of Pennsylvania on the subject of an asylum for the Insane Poor of the commonwealth. Philadelphia, 1840. [Reported by a sub-committee, through their chairman, Dr. Dunglison.]

"A distinguished writer on insanity, M. Brierre de Boismont, who has published a work within the last year on the influence of civilisation on the development of insanity, and who considers the disease to prevail, as a general rule, in a direct ratio with the state of civilisation of the people,—estimates the proportion of insane in different countries as follows:—State of New York, 1 in 721; England, 1 in 783; Scotland, 1 in 563;

neglect this "Second Appeal." And for the sake of the character of our native state, we hope that Maryland will not be behind her in the benevolent undertaking and Christian duty. To induce union and efficient action in order to effect so necessary and desirable an object, we earnestly appeal to the state and city authorities, as well as to every philanthropist, and every Marylander. For who, in this enlightened period, so characterised by wisely bestowed and extended charities, will acknowledge himself without sympathy for, and consent longer to forget, the insane poor.

> "Who that bears
> A human bosom hath not often felt
> How dear are all those ties which bind our race
> In gentleness together, and how sweet
> Their force, let Fortune's wayward hand the while,
> Be kind or cruel?"

Dr. Robinson has added a report of the lunatic department of the Baltimore Alms house; from which it appears that the number of patients is 76: 36 males, and 40 females.

Dr. Wood's Obituary Notice of Dr. Parrish.[1]

This is the production of a liberal and enlightened gentleman, desirous of doing full justice to the respected subject of his memoir. Of the career of Dr. Parrish it is not necessary to add any thing in addition to what has already appeared in the pages of the "Intelligencer;" but they who are desirous of knowing more of his private and professional history will do well to seek for it in the notice before us, which is from the pen of a favourite pupil, and one capable of appreciating all his merits.

The late Professor Green, of Jefferson Medical College.—It is with the most profound regret that we have to notice the sudden death of our friend and colleague, who as a man was most estimable, and as a professor of chemistry signally zealous and successful. Hereafter we shall give a brief notice of his useful career.

Norway, 1 in 551; France, 1 in 1,000; Districts on the Rhine, 1 in 1,000; Belgium, 1 in 1,014; Holland, 1 in 1,046; Italy, 1 in 4,879; and Spain, 1 in 7,181.

"The proportion in the large cities he enumerates as follows:—London, 1 in 200; Paris, 1 in 222; Milan, 1 in 242; Florence, 1 in 338; Turin 1 in 344: Dresden, 1 in 466; Rome, 1 in 481; Naples, 1 in 791; St. Petersburgh, 1 in 3,133; Madrid, 1 in 3,350; and Grand Cairo, 1 in 30,714.

"In New Hampshire, when the population did not exceed 280,000, the number of lunatics was estimated at 600; in Connecticut, in a population of 298,000, at 700; in Massachusetts, with a population of about 612,000, there were 1,000; in Virginia, taking the population at 1,200,000, it was considered that there were, in 1838, not fewer than from 600 to 800 insane; and it is probable that there are at this time in Pennsylvania, in a population not exceeding 800,000, not less than 2,000 insane,—of whom, if we take the state of New York as a guide, the proportion of idiots will be about 1200, and of lunatics 800."—*Idem.*

[1] A Memoir of the Life and Character of the late Joseph Parrish, M. D., read before the Medical Society of Philadelphia, Oct. 23, 1840. By Geo. B. Wood, M. D. 8vo, pp. 72. Philadelphia, 1840.

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ART. I.—MEDICAL PROFESSION IN CHINA.

Macao, August 18th, 1840.

To Professor Dunglison.

My dear Sir,—Presuming that as a friend to science and a promoter of its best interests, you might be interested in the state of the medical profession in China, and in the means adopted to instruct the Chinese in its principles, I send you a chapter of the Canton Christomathy, treating upon the subject of medicine, and an article prepared for the August number of the Chinese Repository by one of the officers of the missionary hospital, William Lockhart, Esq., M. R. C. S., exhibiting in some degree the knowledge of human anatomy possessed by the members of the medical corps in China. The subject will be further examined by us as we improve our knowledge of the language, and thus become more able to examine into the mysteries of Chinese medicine.

Enough, however, is known to disprove the assertion of a late writer, that "anatomy is an art unknown to Chinese physicians." It is nevertheless true that their information on the structure of the human frame is of no use to them in their practice, which consists chiefly in feeling the pulse, by which they determine the sickness. It would occupy many volumes to enter into a detailed account of the doctrines of the pulse, as taught by the Chinese writers on medicine. It is enough for us to know that they enumerate twenty-four different kinds of pulses, with their sub-divisions. Du Halde gives an epitome of the doctrines in his justly celebrated History of China, a translation of which was published in London in 1741.

These sapient disciples of Æsculapius almost equal the celebrated nosologists Cullen and Good, when they divide diseases into more than one thousand different kinds.

Let it be our aim to impart to them the more rational principles which govern us in our efforts to cure disease; then may we hope to spread far and wide the blessings which a Sydenham, a Larrey, or a Rush have diffused among their countrymen.

I have the honour, my dear Sir, to be yours, most respectfully,

WM. BECK DIVER.

Section First.

CONVERSATION ON MEDICINE.

1. What is the object of medical science?

It is to protect and preserve human life; hence it is necessary to know the nature of medicines, and the origin of diseases, together with the laws of treating them.

2. In what estimation is medicine held by the Chinese?

Medicine, designed to protect and prolong human life, has been called the benevolent art; and therefore is esteemed second only to the literary profession.

3. What is requisite in order to enter the profession?

You must seek for some celebrated practitioner, and become his pupil. In order to search into the principles of the science, and investigate the nature of remedies, select several medical authors for study, and peruse them until the principles are understood, and your knowledge is extensive; then you may read all the professional writers.

4. Are there any medical schools?

There are none in all the country; but at Peking there has been established a great medical college, and persons most thoroughly acquainted with medicine, and possessing an unblemished character, are after examination selected to enter the college, to fill its offices, and to practise therein. This great medical college has one principal director, and also one of a secondary, and another of a subordinate, rank, who superintend and examine the treatment of all the nine classes of diseases, and who direct all those who are entrusted with the business of the institution. Fifteen members of the college hold the rank of imperial physicians; thirty are overseers; forty are masters of medicine; and thirty rank as bachelors of medicine.

5. Who are some of the ancient eminent physicians?

The earliest were the emperors I'm and Wóng; next were K'ipák and Pákkò; and after them followed Mòhám, Ts'óngkung, Píntséuk, Wát'ò, Shunyü I', Wóng Shukwó, Ch'an Kwai, Hü Háutsung, Lí Shíchan; and also there were Chéung Chungking, Lau Shauchan, Lí Tungún, and Chü Tánk'ai, designated the four great and renowned physicians, who are even to this day much esteemed.

6. What are the best medical books?

The medical books cannot be severally considered; for every branch having its own authors, the doing so would only perplex the student. But for matter and method none equal the "Golden Mirror of Eminent Authors," and the "Comparative Compendium of Medical Writers."

7. How are diseases to be treated?

Always in treating diseases, whether they be internal or external, it is necessary in all cases to examine into the origin of the malady by inspection, by hearing, by interrogation, and by feeling the pulse.

8. Are there any hospitals for gratuitous practice?

Sometimes only there have been such.

9. At the apothecary's shop, in what manner are medicines sold, and how are they compounded?

Medicines, in a crude or prepared state, are purchased from all the provinces, and are either cut in pieces or preserved whole; and then they are measured out according to recipes, sometimes several kinds being compounded together; at others they are formed into ointments, pills, or powders, or steeped in spirits, and retailed in small quantities.

10. Does the penal code speak on this subject?

It speaks respecting physicians: "On injuring or killing persons by an unskilful practitioner," it thus decrees:

"Whenever an unskilful practitioner, in administering medicines, or using the puncturing needle, proceeds contrary to the established forms, and thereby causes the death of a patient, the magistrate shall call in other practitioners to examine the medicine or the wound, and if it appears that the injury done was unintentional, the practitioner shall then be treated according to the statute for accidental homicides, and shall not be allowed any longer to practice medicine. But if designedly he departs from the established forms, and deceives in his attempts to cure the malady, in order to obtain property, then according to its amount he shall be treated as a thief;

and if death shall ensue from his malpractice, then, for having thus used medicine with intent to kill, he shall be beheaded."

Notes and Explanations.

Medical science among the Chinese is in a very different state from that to which it has been advanced by modern practitioners in the west. It is where it was centuries ago: many diseases are regarded as incurable for which modern improvement has devised sure and speedy remedies. However, a more thorough investigation of the healing art, as understood by this people, may yet be of essential advantage to the science. It would probably be found, were the subject sufficiently examined, that the Chinese, as a nation, enjoy as good a degree of health, and on an average attain to as great an age, as any other people.

1. Preventive medicine, or *hygiene*, is a part of the benevolent art to which the Chinese pay great, but evidently not too much, attention; they say, truly, "Prevention is better than cure." The words *pò ts'ūn*, as here used, are quoted from an imperial work, and indicate that the primary object of the science is to preserve and protect men from illness, rather than to heal their diseases, or to cure their maladies.

3. The phrase *í lí*, or institutes of medicine, may be understood as comprising the general physiological, hygienic, and therapeutical relations of medicine, or the general and fundamental principles of the science.

5. I'm tai—Yen te, or the emperor Yen—is otherwise called Shannung, the divine husbandman, and the father of medicine. The emperor Wóng was his successor, and with him K'ípák was cotemporary. Pákkò lived about the same time. Mòhám, Ts'óngkung, with his pupil Píntséuk, lived prior to our era. Wát'ò is the physician said to have laid bare and scraped a bone of the hero Kwán, and so saved him from the fatal effects of a poisoned arrow: one is now styled a god of medicine, and the other of war. Popular tradition says that Wát'ò was decapitated at the instigation of Tsò Tsò, for having proposed to trepan that famous general with a view to cure him of an affection of the brain. Shunyū I' lived near the same time. Wóng Shukwó is known by his work on the pulse, epitomised in Du Halde. Ch'an Kwai is said to have removed diseased viscera. Of Lí Shíchan, who flourished in the reign of Mánlik, of the Ming dynasty, it is enough to say he is the compiler and principal author of the *Pún ts'ò*. There are also many other physicians, ancient and modern, who are highly celebrated.

6. Besides these, there are many others in high repute and extensively used. In the sixth volume of the *Pún ts'ò*, there is a list of 276 medical works quoted by Lí Shíchan; and likewise a list of 440 miscellaneous works, historical, biographical, &c., from which he made extracts for his materia medica.

10. This law, here quoted, forms the 297th section of the penal code, and seems to be the only reference made therein to the medical profession. For engaging in the practice of medicine no license is required; but the physician must beware lest his medicines fail to have the desired effect.

Description of a Chinese Anatomical Plate, illustrative of the Human Body, with explanations of the terms.

The plate, the explanation of which is the object of the present paper, is copied from the *Kashira Gaki zoū ho*, or First Book in Instructing Youth, an encyclopediac Japanese work, containing descriptions, not only of anatomy, but of dress, houses, arts, mythology, &c. Figures of a similar kind are also found in various Chinese medical works. One is contained in the *Luy King*, a book consisting of twenty volumes, a collection of writings on several branches of medical science, anatomy, physiology, practice of surgery and medicine, and hygiene. A similar figure forms one of a series of four large anatomical plates (about three feet long) issued by the imperial medical college. It is possible that this Japanese drawing may have been copied from a Chinese original, but it is much superior in mechanical execution to the Chinese plates. The Chinese are by no means ignorant of some of the general principles of anatomy and physiology, though many of their ideas are so much obscured by what is frivolous and absurd, as to be almost entirely undeserving of attention. This is strikingly exemplified in their endless disquisitions on the *yin* and *yang*, which foreigners have considered as the female and male principles of nature. Almost every square inch of the external surface of the body has its peculiar name; and in all their series of anatomical figures, there are some individual plates appropriated to this extreme marking out of the surface, until the whole body is covered with names. In medical practice, they apply their external remedies to these various spots; and Chinese may frequently be seen with small patches of some adhesive plaster on various parts of the body, on the principle that when there is pain in any particular part of the body, a plaster must be applied on one of these arbitrary spots; these are the places where moxas and cauteries are to be applied, and they are called *heue*. All the prominent parts of the surface, as the shoulder, elbow, trochanter, and knee, are said to be under the influence of the *yang*, or male principle; while the depressions of the surface, as the armpit, bend of the arm, groin, and ham, are under the influence of the *yin*, or female principle!

They have some knowledge of the bones, and of their general shape and position, though they are not at all particular as to the way in which they are joined together, and make sad havoc among what anatomists call the processes of the bones. As to the muscles, they appear to know nothing about them or their use in the system, since they make no other remark upon the muscular substance than giving it the general term of *juh*, flesh. They call the tendons *kin*, and suppose that the strength of the bodily frame depends upon them; it appears to be applied also indiscriminately to all the fibrous cords. In regard to the blood-vessels, no clear distinction is made between the arteries and veins; there are certainly two names, *king* and *lo;* as also the names *king muh* and *lo muh*, given to these vessels. It would appear that *king* is merely the name of the straight vessels, and *lo* of the lateral branches; for in the *Nan King* it is said, "*king chih king chay*, the *king* are the vessels that follow a straight course; and *lo pang hing chay*, the *lo* are those that have a lateral direction." Whether there be any other names given to the blood-vessels is uncertain; but the consideration of this subject, as also of the nerves, must be deferred for the present.

In regard to the shape and position of the viscera they have some general ideas, but these ideas are far from being correct. It appears as if some person had seen an imperfect dissection of the interior of the body, and then had sketched from memory a representation of the organs, filling up parts that were obscure out of his own imagination, and portraying what, according to his opinion, the parts ought to be, rather than what they in reality are.

The following is the description of the plate, beginning at the top; the explanation of the characters is drawn from Chinese sources:

The title of the plate is *Tsang Foo*, the organs of the human body. These organs are divided into two classes. The *tsang*, or parenchymatous viscera, of which there are five, viz. the lungs, heart, liver, spleen, and kidney; *foo*, or membranous viscera, of which there are six, as the large and small intestines, the stomach, bladder, gall-bladder, and the *san tseaou*, the three passages.

Naou, the brain.

Suy hae che yin, reservoir of the marrow, and the abode of the *yin* principle in its highest perfection.

Tung te, it has communication with the sacral extremity of the vertebral column.

How tung ke, the larynx, or passage for the breath.

Yen tung shih, the pharynx, or passage for the food.

Shen chung, the sternal region, or centre of the thorax; it is the space situated between the mammæ, is the seat of the breath, and has the office of envoy or imperial servant; joy and delight emanate from it. It can distinguish between the *yin* and *yang*, and, being the source of change, cannot be injured without danger.

Fe, the lungs; they are placed in the thorax, resemble the flower of the water-lily, and are suspended from the spine; they are divided into two portions, and subdivided into six (*ye*) lobes, four being on the left side, and two on the right. There are holes in them, out of which the sound comes; phlegm is produced in them; they are of a white colour, and correspond to metal. They have the office of transmission, and rule the various parts of the body.

Sin, the heart, is situated in the thorax, and holds the office of prince, or lord and ruler in the body; the spiritual intelligences (the thoughts) emanate from it.

Sin paou, called also *paou lo*, the pericardium; it comes from and envelops the heart, and extends to the kidneys.

Pe he, the bond of connection of the spleen.

Kan he, the bond of connection of the liver.

Shin he, the bond of the connection of the kidneys.

Wei he, the œsophagus.

Kih mo, the diaphragm, is situated below the heart and lungs, and has its several connections with the spine, the ribs, and bowels; it prevents the fetid exhalations from ascending.

Kan, the liver, is placed on the right side; it corresponds with wood, and is of a purple colour; it has seven lobes, and has the office of generalissimo; the *hwan*, or soul, resides in it; schemes and plans emanate from it.

Tan, the gall-bladder, is placed below the liver, and projects upwards into it; it has the office of judge; determination and decision proceed from it; when people are angry it ascends or expands.

Pe, the spleen, is situated near the stomach, corresponds to earth; it assists in digestion, and is of a yellow colour.

Wei, the stomach.

Fun mun, the cardiac extremity.

Yew mun, the pylorus.

The stomach is connected with the spleen, from which the food passes through the stomach into the large intestines; the spleen and stomach have the office of storing up; the five tastes emanate from them.

Che man, the omentum.

Tse, the navel.

Tan teën, the "vermilion field," or pubic region.

Seaou chang, the small intestines, are connected with the heart; the urine passes through them into the bladder, and is then expelled. They have the office of receiving abundance; digestion of the food is carried on in them.

Lan mun, the caput coli, is between the small and large intestines. Here a separation of the contents of the intestines takes place; the watery secretions flow hence into the bladder, and the grosser parts or fæces pass down into the large intestines.

Ta chang, the large intestines, are connected with the lungs, are situated in the loins, and have sixteen convolutions; they are of a white colour, and have the office of forwarding. Transformation is produced in them.

Chih chang, the rectum.

Kuh toau, or *kang mun*, the anus.

Kaou, or *te*, the sacral extremity.

Shin, the kidneys, are situated in the loins; correspond to water, are of a dark colour, and resemble an egg or bean in shape; they have the office of producing power and skill; ingenuity proceeds from them, and the subtle or generative fluid is eliminated by them; above to the brain and below to the sacral extremity they are the rulers. (The urine is not supposed, by the Chinese, to be produced by these organs, but by the separation of the fluid from the solid parts of the food.)

Ming mun, the gate of life; in this plate the *ming mun* is placed between the bladder and rectum, but in other plates the right kidney is called the *ming mun*. It would appear that the right kidney is the *ming mun* in the male, for they ascribe to the kidneys the office of storing up the subtle fluid, while in the female the same name is applied to the uterus.

Pang kwang, the bladder, is placed below the kidneys, and is the reservoir of the urine. There is an aperture in the large intestines (namely, the iliac valve), where the excrementitious matters are separated; the fæces go into the large intestines, and the urine into the bladder; this organ has the office of a local magistrate.

San tseaou, literally, three passages.

San tseaou chay, shwuy kuh che taou loo yay. The exact meaning attached to these *san tseaou* is not very evident, but apparently the Chinese and Japanese attribute all the more obscure functions of the viscera to them; they are supposed to encircle the cavities of the thorax and abdomen, and thus to connect the various viscera together. One description of them is as follows: "They are three in number, the upper, middle, and inferior. The upper one terminates in the superior orifice of the stomach, and governs the ingesta, but not the egesta. The middle one is in the central arch or bend of the stomach, and governs the fermentation and digestion of the food; it sends forth the watery secretions, and elaborates them into the lighter and more subtle fluids, which flow upwards to the lungs, where they are converted into blood, and thus support the animal frame. The lower one commences below the caput coli, and governs the egesta, but not the ingesta." All this is a mere speculation or dream, there being no such organs or functions as those now described. Indeed in the Nan King it is said, "they have a name, but no form or figure."

Tsing taou; the remark in the large plates on this passage is, "agitate the heart, the subtle essence is set in motion, the life gate imbibes and takes it up, and the subtle humours of the three *tseaou* are hereby shed forth."

Neaou taou, the urethra.

"The twelve offices or functions above enumerated must on no account have their relative connection disturbed, or great injury will assuredly arise in consequence. The emanations or vapours being changed, tears are produced."

The Japanese description of the wood-cut concludes with the following remarks on the fœtus: "It is said of the fœtus, that in the first month it is like a pearly dew-drop; in the second, it resembles a peach flower; in the third, the sexes can be distinguished; in the fourth, the form and figure can be perceived; in the fifth, the flesh and bones can be seen; in the sixth, the hair and down on the skin appear; in the seventh, the *hwan* or soul enters, and the child moves its right hand considerably; in the eighth, the *pih*, or mind enters, and the child moves its left hand; in the ninth, it turns itself over three times; in the tenth, the *ke*, spirit or subtle fluid, enters, and the fœtus is then born."

The purpose for which such communications as the present are made, is not that we may acquire any increase to our present stock of anatomical or medical knowledge, but that we may know exactly what are the ideas which the Chinese themselves have on these subjects, and to ascertain the names they apply to the parts of the human body, the names of diseases to which the body is liable, and the names and qualities of the plants and minerals they use as remedies. And before we can in any wise attempt to improve the state of medical and surgical knowledge among the Chinese, it is of the utmost importance that we first obtain a distinct knowledge of their own opinions and theories, vague and indefinite though most of them be.

It is not to be supposed that all the opinions they entertain on medical subjects are mere nonsense, for some of their works have evidently been written by men possessed of considerable talent, and who have carefully examined into the nature and causes of disease; and the rules and precepts given for the management of some affections are by no means to be despised. Still, the whole system of medicine is very defective; thus disease is supposed to arise in consequence of the fanciful accordance between the viscera, the pulse, metals, earth, colour, sound, &c. being destroyed; and then fever and other disordered actions are produced, and the remedies given are intended to restore the natural harmony between the organs and these elements,—which being accomplished, the health will be recovered. It is requisite, in reading Chinese medical books, to ascertain the accordances which are supposed to exist between the organs and various external objects, otherwise the idea intended to be conveyed to the reader will not be ascertained. It must always be borne in mind that although the Chinese reasoning on physiological subjects is in many cases erroneous, still the language in which those theories are expressed is accurate, and the descriptions, so far as they go, clearly convey the intention of the author. L.

ART. II.—ON PATHOLOGY OF THE JOINTS.

Concluded from page 297.

2. *Diseases of the Articular Cartilages.* We pass now to the consideration of the morbid alterations of the articular cartilages, and we come at once upon a fundamental question: Are there any proper diseases of articular cartilage? Are not all those that are so called the results of disease of the adjacent tissues and of the action of their products? The doubtful circumstance on which the answers to these questions must ultimately depend is the organisation, or, to speak more definitely, the vascularity of the cartilages. We will first consider the statements and opinions of those who oppose the vascularity and independent morbid alteration of these tissues, and then express our own opinions and those to which we assent.

The work of Dr. Schumer affords a good summary of the arguments generally advanced by the opponents of the independence of cartilages. The vascularity of articular cartilage might, as he rightly says (p. 11), be determined, 1st, by the flow of blood from a wound of its substance; 2d, by injection; 3d, by microscopic examination; 4th, by the morbid changes, if they are of the kind which cannot occur without vessels. But by none of these means, he and many others affirm, can their vascularity be demonstrated.

That no blood flows when an articular cartilage is wounded we readily admit; but no blood flows when the iris is cut, as in making an artificial pupil, or in any other operation, unless it is torn away from the ciliary ligament. Yet who doubts the vascularity of the iris, or that it is subject to peculiar diseases? And the tissue of articular cartilage is even more adapted for the prevention of hemorrhage from vessels divided in it than that of the iris is; for it is compressed within the limits of the space which by its unrestrained elasticity it would occupy, and, therefore, when it is cut, its particles instantly spring up against each other, and at once close any vessel that may be divided. The evidence of the absence of bleeding from its wounds is therefore valueless; the hemorrhage from a tissue is not directly proportioned to the size of its vessels, but to the circumstances in which they are placed, whether the tissue around them is unyielding or loose, whether and how soon they can contract, &c.

The evidence of injection is equally unsatisfactory. It is, we believe, true that no one has yet succeeded in forcing a coloured fluid into the very substance of the healthy articular cartilage; but it may be driven into vessels running over its free surface. We have done this in a perfectly healthy joint; but it is much less difficult when, by an inflammation, the synovial membrane covering the cartilage is slightly swollen; injection will then pass in distinct branching vessels derived from the circulus articuli vasculosus, for more than half an inch over the edge of the cartilage, in exactly the same manner as the vessels pass from the conjunctiva over the front of the cornea. Now it is not in the smallest degree probable that these vessels stop suddenly at this distance upon the surface of the cartilage, without passing like those of the cornea (to which they are in other respects so similar,) over the whole surface, and dipping into the substance of the cartilage itself. Nor is it more probable that a dense non-vascular tissue should thus be placed between two vascular surfaces; there is but one instance in the body of a non-vascular organ so situated—the crystalline lens—and we need not say how distant is the analogy drawn between it and an articular cartilage.

In addition to these vessels of the synovial membrane covering the cartilage, we believe that another set exists, which pass vertically from the bone through the little canals, which are so distinct by the pink points that are seen when a slice is cut from the surface of the cartilage of a young animal. These have not indeed been yet injected; but the art of injecting is not yet so perfect that from its negative evidence we can have any right to draw a positive conclusion. The vessels of the healthy cornea have been demonstrated by injection only within the last four years; those of the cartilages of the ribs and larynx within the last ten years; and those of the tendons have only been injected within the last twelve months. The articular cartilages evidently present many more difficulties to injection than these; but there is no reason to believe that they may not yet be surmounted. Till the tissues just mentioned had been injected, their vascularity was denied or doubted by those who are not content with any but visible proofs; but long previously, their morbid changes were sufficient to establish their vascularity to every impartial mind.[1]

That vessels should be invisible when the articular cartilages are examined with the microscope is no wonder; they cannot when empty be discerned by it in many even of the most vascular tissues.

We come, then, lastly, to that which is by far the most interesting and important argument for the existence of an independent morbid action in the cartilages, and that such an action as we cannot conceive to be carried on without blood and blood-vessels,—the changes which they undergo in disease. This subject has been examined experimentally, and especially by Dörner,[2] Gendrin,[3] Cruveilhier,[4] and Schumer, and the general result of their investigations is the impossibility of exciting any evident inflammation in an articular cartilage by any mechanical injury. But it is clear that these cases furnish of themselves the contradiction to the conclusions drawn from them; for no effect was produced by the injury upon the cartilage, although all the other tissues of the joints were vehemently inflamed. Now, if the cartilage were not destroyed by the action of its own vessels, why was it not destroyed by those means to which they ascribe its destruction in common inflammations of joints? The experiments show that in the midst of a most acute inflammation of the synovial membrane, such as is produced by cutting a joint wide open, the cartilages remain for some days unaltered. They, therefore, prove nothing; for they are as strong evidence against the power of any external means produced by synovial inflammation to destroy the cartilages, as they are against the cartilage being able to destroy itself. They only prove that in an acute inflammation of a joint the cartilages are not always ulcerated.

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[1] Since this was written our belief has been most happily confirmed by Mr. Liston's account of his injections of the articular cartilages of diseased joints, in a paper read at the Medico-Chirurgical Society. Of course we can at present only announce the fact; but we may add, that an inspection of the specimens that were exhibited in the society's rooms unequivocally established the author's description of vessels in the very substance of the cartilage. The injections were among the most beautiful we have ever seen; and we cordially congratulate the possessor on having surmounted the greatest difficulty of this art.

[2] De gravioribus quibusdam cartilaginum mutationibus. Tuburg. 1798.

[3] Histoire Anatomique des Inflammations.

[4] Archives Générales de Médicine. Fevr. 1824.

But suppose that by disease, or after an experiment, the cartilage is removed from the head of a bone. What are the means by which that removal has been effected? Softening and solution in the pus or other fluid effused into the joint? Absorption by the surrounding synovial membrane, or a tissue produced from it on purpose? Or independent ulcerative action in the cartilage itself? The first is the common opinion of those who do not receive the third,—the second is that propounded by Mr. Key,[1]—the third is that of Sir B. Brodie and many others, and that which we have now little hesitation in adopting. The first two explanations can be applied only to those cases in which the cartilage is progressively removed from its synovial surface towards the bone; they can have no application in the cases in which its removal is effected in the opposite direction, in which it is, as it were, undermined, and its connection with the bone destroyed. In these latter cases it is by all supposed to be absorbed by granulations produced from the bones; but we shall offer some reasons for doubting the correctness of this view.

First, for the theory of the solution in pus. Schumer relates an experiment in which a portion of cartilage, placed in a suppurating fistulous passage, was found after seven days opaque and yellowish, and half dissolved. But ten such experiments could have no weight against the fact which every one must have had the opportunity of observing, viz. that after pus has remained even for many days in a joint, the cartilages may still be neither softened nor in any other way altered; and that if they are irregular in certain isolated parts of their surface, the parts which still remain attached to the bone are quite firm and polished. This is especially the case in that class of suppurations which occur coincidently in several joints, and which we have already alluded to as sometimes accompanying phlebitis. In these cases, after a joint has been distended for many days with pus, all the evident change in the cartilage is that a portion seems as if it had been chipped out of it with some blunt instrument. The surface that is left, and all the rest of the cartilage, is still firm, of its natural bluish-white colour, and intimately attached to the bone. Now, if pus had the least power of dissolving cartilage in the living body, such facts as these could never be observed; the cartilage in such a suppuration of a joint would be evenly thinned over its whole extent, and that which remained would be soft and loose, and half dissolved, or flocculent and unable to bear the pressure of the finger; but such an appearance is in common inflammation of a joint never seen. Portions of cartilage are always entirely removed; and that which remains possesses a healthy aspect, if not its normal connections.

The theory of Mr. Key, which is in part adopted also by Mr. Adams, is far more ingenious, and is founded on facts of more seeming authority, than this of solution by pus. An admirable criticism of it forms the greater part of the important appendix to the present edition of Sir B. Brodie's treatise. The theory is briefly this: When ulceration of the cartilage ensues as a result of synovial inflammation, the removal of its tissue is effected, not by its own vessels, but by those of a very vascular process of synovial membrane which grows over the border of the cartilage, or by those of a similarly vascular membrane produced from the synovial membrane, and receiving its vessels from it, which spreads over the free surfaces of the cartilages and absorbs them.[1]

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[1] On the Ulcerative Process in Joints, Medico-Chirurgical Transactions. Vol xviii.

The fact upon which this theory is founded is, that in many cases where the synovial surface of a cartilage is grooved, or as Sir B. Brodie happily expresses it, *chiseled* out by ulceration, the depression is found occupied by a process of membrane from its synovial lining, which has a very vascular and fringed border, like one of the "glands of Havers." This Mr. Key believes has absorbed the cartilage by a process analogous to that by which the removal of the sequestrum of cylindrical bones under necrosis takes place. Now, the question of the absorption of dead bone is too long to be entered upon at length here; but we may observe that the experiments of Mr. Gulliver, supported as they are by many facts of constant occurrence, render it certain that a sequestrum separated from its vascular connection is never in any degree absorbed by the surrounding vascular parts, but remains, as the loose fragments of fractures often do, unaltered for months and years. The same experiments render it very doubtful whether a dead portion of bone, even still adhering to living bone, is ever lessened by the absorption of the vessels of another part; much less, then, is it probable that a living tissue, however slightly vascular, should be absorbed by the vessels of another adjacent tissue; nor do we know a single example in which it can be proved that the vessels of one living part or tissue have the smallest share in effecting the ulcerative removal of another. It is evident, therefore, that no imagined analogy to any of these other processes is deducible in favour of Mr. Key's view, for they are themselves, if not opposed to his idea, at least most ambiguous.

Again, it is clear that this assumed mode of ulceration by the action of a destroying growth from the synovial membrane cannot explain all cases; for in many the cartilage is removed when it was opposed to another cartilaginous surface, and in these, and in many more, the ulceration occurs in a part of the articular surface to which no synovial growth could have access, as on the very centre of the patella, on the middle of the condyles, and on the head of the femur not near the ligamentum teres, on the middle of the head of the humerus, &c. From all these parts portions of cartilage are often found removed, while that around them is healthy; so that it is evident that even in some of the cases in which the membranous process does exist, it could only have arrived at the ulcerated part by passing over the healthy surface. But in many of these cases of isolated ulceration, and indeed in the large majority, the synovial membrane has no processes growing from it at all. And it is not in the least probable but that in all these cases the process employed is essentially the same; a single case, therefore, in which a growth from the synovial membrane is not found, though the cartilage is absorbed on its synovial surface, would throw great doubt upon the theory; and when such cases are far from rare, they must be fatal to it. They are so far from rare, that we believe that many surgeons to whom the ulceration of the cartilages is a familiar appearance, have never yet seen such processes from the synovial membrane as Mr. Key describes.

But still this vascular growth is sometimes seen exactly fitting into the cavity in that portion of the articular surface from which the cartilage is removed, and certainly to an imaginative mind it looks just as if it had been eating and growing on the food it derived from the edges of the hollow it had made; it looks like a worm in its hole. How, then, did it get there?

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[1] We cannot but remark the singular mode of expression which Mr. Key, reasoning straightway from facts to final causes, adopts in reference to this process; speaking of it as a curative effort of nature, whose object is in these diseases of the joints to produce, as a natural *cure*, anchylosis. This may be, surgically speaking, a cure, because the patient does not die,—yet we scarcely call it a cure, if from inflammation of his eyes a patient loses his sight; and vision is not more a function of the eye than motion is of a joint.

To explain it, the structure of the joints must be considered; they are cavities with firm and scarcely yielding walls, and they admit of no change of volume except with an inversely proportioned alteration in the quantity of their contents. If the cavity of a joint increase in size, more substance must pass into it to fill it; if it decrease in size, something must pass out of it. They are in this respect exactly analogous to the cranium, into whose cavity, if the mass of the brain become smaller by atrophy, or other loss of substance, more fluid must be and always is effused; if the brain become larger, fluid must pass out of the cranium (unless in children in whom the head can expand), and the brain is then found dry, and without fluid either in its ventricles or membranes. There are cases of cerebral disease in which effects are observed exactly analogous to this growth of the synovial membrane into the joints. When, in consequence of an apoplectic effusion, an abscess, or any other disorder in which a portion of the brain is destroyed, the volume of the contents of the cranium is lessened, inasmuch as the size of its cavity remains for the time unaltered, it is certain that either something must be added to the volume of the contents, or that the volume of the cavity must be reduced. The contents of the cavity must exactly fill it, or a vacuum would exist, which we need scarcely say is impossible. The subject is admirably illustrated by some of the cases of atrophy of the brain detailed by the late Dr. Sims, in his paper on that subject, in the 19th volume of the Medico-Chirurgical Transactions: "The chasm occasioned by the atrophied state of the brain," he says, "we observe to be sometimes filled up by serous fluid and by *deposits of bone on the skull,*"—"the hypertrophy which takes place in the bones of the cranium is very frequently confined to the inner surface of the os frontis, in other cases it is more general."—(P. 367.)

There can be no doubt that in the living body, as in inorganic matter, if the size of an air-tight cavity be increased its contents must expand, or if not expansible, must have something added to them to fill the cavity; or if the size of the contents of a cavity be diminished, its walls must fall in. These are the simple principles on which, when in the adult the brain grows larger, the skull grows thinner; and when the brain becomes smaller, the skull becomes thicker, or more fluid than natural is effused within it. To apply the same principles to the disease of the joints now under consideration: a portion of the synovial surface of an articular cartilage is removed by the ulcerative process of its own vessels; what is to fill the space thus produced in the cavity of the joint? In most cases, as in most of atrophy of the brain, fluid (either pus or synovia) is effused in increased quantity; but in some, as in some of atrophy of the brain, the surrounding tissues grow in and fill up the chasm. The process, or as it might be called, the hypertrophy of the synovial membrane, is the exact analogue of the hypertrophy of the bones of the skull.

In this explanation nothing improbable is involved. It is assumed that the first change is the absorption of the cartilage, and that it may be the first is certain, because in some early examined cases it is the *only* change; by such an absorption a vacuum *must* be formed in the joint; and something *must* fill it up; that *something* is either fluid, or an increased growth of synovial membrane, or a newly-formed false membrane. We can indeed determine, if the part of the cartilage absorbed be known, what will be produced to fill its place; if the middle of the surface be ulcerated, fluid will be effused and no membrane produced; if the borders of the cartilage, then membrane grows into the cavity as fast as it is formed.

Thus much of the presumed explanations that have been offered of superficial ulceration of articular cartilages, to remove the apparent difficulty of their possessing too small a degree of vascularity to effect their own ulceration. Neither of them is free from far greater objections than those which they are intended to surmount.

The opinion is more commonly received, and certainly more plausible, that in the deep ulceration in which the cartilage is undermined from its connection with the bone, the vascular granulations that grow into the hollow between them are the agents by which the absorption of the under surface of the cartilage is effected. But even against this view there are many objections; as the improbability of one tissue being absorbed by the vessels of another, and that healthy bone (for in some though not in most of these cases the bone is found unaltered,) should produce granulations to do such irreparable mischief. It is certain that if the absorption of the under surface of the cartilage were the first step in the process, granulations or something *must* grow from the head of the bone to fill up the cavity that would else be formed; and that the cartilage is first absorbed is rendered probable by the frequent coincidence of similar absorption on its opposite (synovial) surface, which we have already shown is often a primary affection.

The growth of granulations into such a cavity as the independent ulceration of the under surface of the cartilage would form is easily producible at will. If a hole be bored in a bone and the integuments replaced over it for a few days and then again raised, the hole will be found exactly filled by a growth of vascular granulations from the surface of the tissues that lay over it, just as in this case each little cavity on the under side of the cartilage is occupied by a growth of granulations from the subjacent bone.[1] The same action no doubt produces the granulations in both cases, as well as in all those in which granulations appear to be eating away the surface of an ulcerating tissue. In all the growth and increase of the granulations is secondary; a necessary consequence of the removal of adjacent tissues; they do not form the holes, but they grow into the holes that are formed by the tissue's own vessels.

The explanations, then, which the opponents of the independent morbid action of the cartilages have offered, are at present insufficient to account for the phenomena. The removal of cartilage is fairly referrible only to a process of ulceration which is effected by its own power; and even in the absence of any other evidence for their vascularity, this alone might be sufficient proof of it. When to the evidence which it affords we add the proof of the vascularity of their synovial surface,—the occasional appearance of vessels even in their substance when diseased—as in the case described by Mr. Mayo (Med.-Chir. Trans. vol. xix, p. 63,)—the occasional existence of a vascular false membrane passing from the synovial surface of one cartilage to that of another, without any communication with the walls of the joint, and without any apparent vascularity of the adjacent synovial surface,—the peculiarities which it presents in some other diseases,—the weakness of all the objections invented against its vascularity, and all the evident improbabilities of a non-vascular substance existing in such circumstances and presenting such phenomena as cartilage does,—by all these the vascularity and independent power of this tissue may be deemed sufficiently well established to be admitted in the explanation of the various forms of ulceration to which it is subject.

Of all that have been offered, the most concise and correct view of the ulcerations of cartilage is, in our opinion, that which Mr. Mayo has given in the paper just referred to; it is that which with very slight modification we should exactly adopt. There are three kinds of ulceration of articular cartilage: one in which it commences from the synovial surface; a second in which it commences at the surface next the bone,—in both these the substance of the cartilage that remains is white, firm, and scarcely altered in appearance; in the third kind the remaining cartilage is softened, and converted into a fibrous or brush-like substance.

In the first class of cases, which may be called simple superficial ulceration, a portion of the surface of the cartilage looks as if it had been irregularly chipped or chiseled out; the surface thus exposed retains its natural colour, its firmness, and its polish. When a joint thus affected is opened, it is scarcely imaginable that so little should be left by such formidable symptoms as those by which the disease was accompanied; for sometimes the redness of the synovial inflammation by which this form is accompanied has passed away, and nothing is found but the uneven cartilage. The most common cause of, or at least coincidence with, this kind of ulceration, is intense or long-continued inflammation of the synovial membrane, such as occurs in penetrating wounds of the joints, or in perforation from ulceration, or in the diffuse suppurations met with in phlebitis, or such as are sometimes produced by any of its common causes, as cold, &c. The effusion of pus into the joint is of course the result of the synovitis, and is generally coincident with the ulceration of cartilage; but neither it nor the effusion of lymph are essential to this affection. Most commonly there is also coincident ulceration of the cartilage on the surface next the bone; but in some cases this is absent, and especially, we think, in those which accompany the general and apparently metastatic suppurations in phlebitis; in these the cartilage always retains its firm connection to the bone, and can no more be torn from it than it can in health. When the ulceration in this form has extended down to the bone, it exposes a healthy surface, or one only increased in vascularity; and at any period one may determine that the ulceration commenced on the synovial aspect, by observing that the exposed portion of bone is smaller than the area of the synovial aspect of the ulcer, so that the borders of the ulcer shelve downwards and inwards, and have their thin edges more or less adherent to the bone that is exposed.

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[1] This experiment was often performed by Du Hamel; see his Papers on the Reproduction of Bone, in Mém. de l'Acad. des Sciences, 1739-43.

In the second kind of ulceration of articular cartilage, which may be called simple deep ulceration, the cartilage is at first removed only on the surface next the bone; it is undermined, and may be torn up from the osseous surface, or is even found hanging from it in pieces, or lying loose in detached portions in the interior of the joint. Its under surface is rough and irregular, as if coarsely worm-eaten; often its whole thickness is perforated, and on opening the joint the cartilage looks riddled with little vascular masses of granulation projecting through its apertures from the bone beneath it.

The exposed surface of bone is highly vascular, and wherever the cartilage is separated, is covered by prominent, soft, and very red granulations, which fit into the cavities on the under surface of the cartilage. It is probably to the pressure of the cartilage on these granulations that the exquisite pain which accompanies this form of the disease may be ascribed. The cartilage itself can scarcely be the source of pain of the character here felt; but the peculiar acuteness of the suffering produced by even lightly touching the granulations from bone is sufficiently well known.

In some cases the bone is evidently softened, and atrophied or ulcerating; but in others it retains all its firmness, and except for an increase in its vascularity, might be deemed healthy. The latter is rarely found in diseased hip-joints; but more commonly in the most acute cases in which ulceration of the cartilages occurs in coincidence with intense synovitis; in chronic cases the disease, commencing with a moderately acute inflammation of the synovial membrane, goes on to affect in turn all the tissues belonging and adjacent to the joint, or it commences in the cartilage, or simultaneously in the bone and cartilage. The ordinary cases of chronic diseased knee-joint are examples of the first kind; those of morbus coxæ, the scrofulous diseases of the hip-joint of young subjects, are instances of the second.

In all these forms of disease, however, and whatever be their origin, their ultimate effects, if unchecked, are disorder and functional destruction of every tissue. The effects of the first stages can be learnt only by the examination of extremely acute cases, and of those in which accidental death has prematurely placed them at our disposal, or by the careful comparison of a great number of advanced cases. From both the result is that the absorption of cartilage may be the initiative; but that in the majority of cases it is subsequent to inflammation of the synovial membrane.

The third form of ulceration of the cartilages, in which its tissue is converted into a fibrous or brush-like substance, is by far the rarest. It is a chronic disease, and appears to commence on the synovial surface, for the part of the cartilage next to the bone and the bone itself are usually healthy.

We had intended to consider the pathological changes observed in some other forms of diseases of the joints, and to point out the general deductions which the present state of knowledge permits to be drawn from them; but this article has already run its full length, and we must for the present leave the subject.

MISCELLANEOUS NOTICE.

Medical School of the New York University.—The public prints have announced the re-formation of the medical school of the University of New York; the former professors of which—dissatisfied with the acts of the council—resigned their situations about two years ago, and before even they had entered upon their duties as teachers. The list of the present faculty includes the names of Drs. Paine and Bedford, of the former faculty, and has the additional names of Professors Pattison, Revere, Mott, and Draper. The institution will go into operation in October next.

This arrangement will deprive the Jefferson Medical College of two of its able and zealous teachers. By a singular coincidence, the sudden death of Professor Green and the appointment of his two colleagues to the new university occurred almost simultaneously. We shall part with our friends and colleagues with regret, and with a sincere desire that their exertions may be profitable to themselves and to the profession in the new sphere which they have selected. For ourselves, there has ever been but one rule of thought and of conduct,—founded on a desire to see every honourable association of teachers—no matter where situate—flourish according to their merits; and no paltry inducement of self-aggrandisement has ever led, or could lead, us to interfere by word or deed with their useful labours. A spirit of emulation is of course desirable; but it should be an emulation as to which institution can best promote the dignity of the profession, and, through it, of the community. To effect this, it is never necessary to disparage the efforts of others; whilst it is indispensable to be honourable and energetic ourselves.

With these views, as honestly entertained as they have ever been openly expressed, we desire to see the new university of New York proceed onwards, and at an equal pace with the different elevated medical institutions of the country. The loss to the Jefferson Medical College by the death of Professor Green, and by the secession of Professors Pattison and Revere, is sincerely deplored by us; but we should not express our honest conviction did we say it was irreparable. We are fully satisfied, indeed, that the board of trustees of the institution will look with a single eye to the supplying of the present vacancies in a manner that will add to the harmony, stability, reputation, dignity, and honour of the school; and should such a determination be rigidly carried into effect, they cannot fail to succeed.

NECROLOGY.

Professor Green.—In our last number we announced the death of our estimable friend and colleague in the Jefferson Medical School, and promised a brief notice of his useful career. The following, which appeared in the Saturday Courier of February the 6th, from the pen of a friend of the deceased, is so appropriate that we prefer to copy it:

"The sudden death of Dr. Green, late Professor of Chemistry in the Jefferson Medical School of this city, has cast a gloom over that institution, and throughout a wide circle of friends and relatives. Dr. Green was the son of Dr. Ashbel Green, the eminent and aged Presbyterian clergyman of this city; and for many years was professor of chemistry in Princeton College, New Jersey. After removing to this city, Professor Green, in conjunction with Dr. George M'Clellan and the late Dr. John Eberle, founded the Jefferson Medical College of this city, in which he continued to fill the chemical chair until his death.

"The reputation of Dr. Green as a lecturer was very high, both with his pupils and the public; and his works on Electro-Magnetism, Chemistry, Astronomy, and Trilobites, placed him among the most scientific men of the country. His cabinet of shells, minerals, and coins, was large; and his constant contributions to the scientific journals of the day evinced him a close student, and a sagacious investigator and collector on all subjects to which he turned his attention. The cause of science and literature has by his death sustained a severe loss, and the withdrawal of his services and high reputation from the school with which he was so intimately connected will create a vacancy not easily supplied.

"We learn that on last Sunday night Dr. G. attended church as usual, and appeared in his customary health on retiring to rest. Early in the next morning he complained of a feeling of suffocation, and before Drs. Dunglison or Harris, who were both sent for, and came immediately, could reach him, expired. The cause of his sudden demise proved to be an enlargement and ossification of the heart.

"His funeral took place on last Thursday, and his remains were followed to the grave by a large number of friends, who loved him when living, and mourn him when dead."

The following resolutions are expressive of the feelings of the board of trustees, the faculty, and the students at this sudden dispensation, which has deprived the institution to which he was attached of a zealous and efficient preceptor:

Jefferson Medical College, February 4, 1841.

At a special meeting of the board of trustees of Jefferson Medical College, held this day, the following resolutions were unanimously adopted:

Resolved, That this board are deeply sensible of the loss the institution has sustained in the death of Professor Jacob Green, who, during his connection with it, commencing with its origin, executed the duties of his chair with eminent ability and fidelity.

Resolved, That this board entertains for his memory the deepest respect, endeared to them not only by the faithfulness with which he executed his public duties, but by his exemplary deportment in the relations of private life.

Resolved, That this board sincerely sympathise with the bereaved family of Professor Green in the irreparable loss they have sustained, and that a committee consisting of Rev. Dr. Cuyler, the Hon. Edward King, and John R. Jones, be appointed to convey the expression of these feelings to them.

From the minutes. John R. Vogdes, Secretary.

February 1st, 1841.

A special meeting of the faculty being convened at the college this day, in consequence of the death of Dr. Jacob Green, late Professor of Chemistry in this institution, the following resolutions were adopted:

The professors have heard with grief and deep regret of the sudden death of their beloved and respected colleague.

Resolved, That the lectures be suspended until the day after the funeral; that the professors will attend the obsequies, and that they will wear the customary badge of mourning for the remainder of the session as a testimonial of their friendship and respect for the memory of the deceased.

Resolved, That a copy of these resolutions be enclosed to the family of the deceased, as an expression of the sympathy and condolence of the members of the faculty. JOHN REVERE, M. D., Dean of the Faculty.

February 1, 1841.

The melancholy news of the sudden death of Professor Green having been announced this morning, a meeting of the class was immediately convened. The meeting was organised by calling J. P. Woods, of Virginia, to the chair, and appointing J. Stuart Leech, of Pennsylvania, secretary. The chairman having briefly stated the sad and unexpected calamity which had befallen them and the institution at which they are in attendance, it was on motion

Resolved, That a committee of twelve be appointed to draft resolutions expressive of the feelings of the class, occasioned by the sudden bereavement of their much esteemed and endeared professor, Dr. Green.

Whereupon the following gentlemen were appointed said committee:—Messrs. J. A. Chilton, of Va., Wm. H. Scott, Pa., C. A. Harding, Md., S. D. Mullowny, M. D., Mo., Irby Dunklin, S. C., Z. T. Chunn, M. D., Va., John Pattison, Pa., J. F. Gaylord, N. C., A. Hepburn, Pa., R. W. Christy, Pa., Wellington Bird, Pa., G. T. Mason, Va.; and on motion the chairman and secretary were added to the number. The committe reported the following resolutions, which were adopted:

Resolved, That the death of our esteemed teacher has been heard with the deepest regret and sorrow, and that we lament most sincerely the loss thus occasioned to his family, to society, and to science.

Resolved, That his kind and gentlemanly manners, which secured to him the warmest affection of his class; his generous friendship, which attached his numerous students to him with a feeling akin to filial love; and his scientific attainments, which have ever commanded for him a high place in public estimation, are stamped upon our memories with too deep an impression ever to be effaced, so long as virtue is honoured, friendship cherished, and knowledge admired.

Resolved, That we duly appreciate the loss sustained by the college in his death, and lament the vacancy in the faculty thereby occasioned.

Resolved, That our deepest condolence is tendered to the sorrowing family of the deceased, with an assurance that although no tie of relationship existed, our hearts respond to their anguish in melancholy submission to the will of Him who rules in wisdom and in mercy.

Resolved, That the dean of the faculty be requested to transmit a copy of these resolutions to the family.

Resolved, That as a testimony of respect and sorrow, the class wear crape on the left arm during the remainder of the present session.

Resolved, That we will meet at the college on Thursday, at 2½ o'clock, P. M., and proceed thence in procession to attend the funeral obsequies of our lamented friend and professor.

Resolved, That the proceedings of this meeting be published.

J. P. WOODS, Chairman.

J. Stuart Leech, Secretary.

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For the American Medical Intelligencer.

ART. I.—CASE OF CONFLUENT SMALL-POX, ATTENDED WITH OPISTHOTONOS.

BY JOHN S. ROHRER, M. D., OF PHILADELPHIA.

June 13th, 1840. Was called to see a child aged twenty months, son of Mr. L——, a respectable mechanic in the city of Philadelphia, labouring under an attack of convulsions. The child had been unwell a few days before, but no medical aid was called for. The convulsions had commenced half an hour previous to my arrival. I immediately had recourse to the warm bath, which soon allayed the spasms. Supposing the convulsions to have originated from irritation of the bowels, I ordered a warm poultice of bread and milk over the stomach and bowels, and prescribed a few grains of hydrarg. submur. joined with pulv. ipecac. and cret. ppt. to be followed in a few hours after with castor oil. Plenty of mucilage of gum Arabic was also ordered. In the course of a few hours the medicine operated, and the child was much relieved.

3 o'clock, P. M. Found the pulse rising, with some degree of tension, eyes turned up, with an increase of heat on the surface. Ordered bleeding at the arm, which was not attended to on account of a supposed change for the better.

14th, A. M. Was called in a great hurry, found the child in convulsions. I immediately bled it at the arm to the extent of four or five ounces, and put the patient into the warm bath; the convulsions soon ceased, and the child was again relieved. This proved, however, but temporary relief, for in the course of an hour the pulse rose to one hundred, with considerable hardness. The pupils of the eyes were contracted, and a great determination of blood to the head seemed to be the result of the last convulsion; insensibility and stertorous breathing soon followed. P. M. same day, ordered leeches to the temples and ice water to the head. Gum water continued.

15th, 8 o'clock, A. M. No convulsions, but delirium and symptoms of encephalic inflammation; pulse quick, with slight tension; difficulty of drawing blood from the arm; had leeches applied to the temples, behind the ears, and neck; about three ounces of blood taken; cold application to the head continued. Tongue furred and red round the edges.

15th, P. M. Fever somewhat abated; bowels freely open; spt. Mindereri administered at repeated intervals. Gum water continued, of which the patient drank freely.

8 o'clock, P. M. Heat and arterial excitement increased; ordered more blood to be drawn by leeches; objected to by the family.

16th, A. M., 8 o'clock. Fortunately for my little patient, one of the leech-bites was discovered bleeding this morning, which must have bled all night, as nearly four ounces of blood were found between the folds of the bed-clothes. Patient much better, looks around lively, and calls for food; bowels, however, too open; ordered small doses of cret. ppt. and cinnamon water at repeated intervals. Cold applications to the head discontinued.

16th, P. M. An eruption now begins to show itself all over the body resembling *measles*.

17th, A. M. The eruption assuming the form of *vesicles;* fever much abated; pulse soft, but rather frequent; head relieved; tongue clean.

18th, A. M. Pustules forming; head and face somewhat swollen.

19th, A. M. Swelling of the face and head increasing, and fever considerable; patient sensible; no preternatural determination of blood to the head.

19th, P. M. Confluent variety of small-pox; eruption very great, extending all over the body; restlessness very great; much anxiety evinced, and throwing about of the limbs.

20th, A. M. One extensive mass of *eruption*; eyes closed from swelling; symptoms of *opisthotonos*.

20th, P. M. Opisthotonos more marked; patient swallows fluids; great restlessness; throws its arms and legs about incessantly; starts occasionally.

21st, A. M. Head drawn back between the shoulders, the muscles of the neck and back extremely rigid; bowels opened with castor oil.

22d, A. M. Spasms of the muscles of the neck, back, and of the lower extremities. One leg drawn back in the direction of the spine, and raised from the other. Patient lies on his side altogether. Head and hips thrown backwards, forming a curvature of the back, and describing an arch. Abdomen tympanitic, and abdominal muscles extended.

23d, A. M. The pulse frequent, and almost imperceptible; eruption extensive; head and feet drawn back; spasms of the muscles of the back and neck. The child rests now almost on the back part of the head and on the left side of the pelvis; face and chin thrown backwards from the breast; jaws rigid, but the patient still capable of swallowing fluids; plenty of slippery elm tea administered; grinding of the teeth; thirst great; extreme restlessness. It is with difficulty that the patient can be kept from seizing hold of his legs and bed-clothes. This grasping of the legs appears to be the effect of involuntary action. Tongue swelled and full of pustules.

24th, A. M. Hot fomentation to the spine, and mucilaginous drinks continued. Great action of the carotid arteries; bowels irritable; frequent discharges of mucus, dark in colour.

P. S. Spasms of the muscles of the back and neck; swelling of the face decreasing.

8 o'clock, P. M. Muscles of the neck and back rigid, but no spasms; snores; eyes still closed.

25th, A. M. All the symptoms better, one eyelid elevated so that part of the eye can be perceived; less determination of blood to the head; pulse less frequent; no spasms of the muscles of the neck and back, but some rigidity; the head thrown more forward in the natural position; still grinding of the teeth; mucilaginous drinks continued; bowels open, and a watery green fluid with mucus discharged.

25th, P. M. Return of spasms of the muscles of the neck and back, producing great agitation of the whole body. Head thrown back, hips elevated and inclining backwards, producing a curvature of the spine backwards as before. Heavy breathing and apparent insensibility; frequent watery discharges; prescribed the following:

℞. Hydrarg. submur. gr. iij.
Pulv. ipecac. gr. ij.
Cret. ppt. gr. vj.
Pulv. Doveri, gr. vj.
M. ft. pulv. No. iij.
One every three hours.

26th, A. M. Patient better; hopes of recovery entertained by the family; rigidity of the muscles of the neck and back softened and relaxed; eyes open; patient takes notice of surrounding objects; extremities rather cold, pulse extremely weak; no spasms during the night; diarrhœa stopped; ordered beef tea and mucilaginous drinks, principally elm tea; warm emollient poultice applied to the stomach, and warm cloths to the hands and feet.

26th, P. M. Patient more feeble; pulse small; eyes turned up when asleep.

27th, A. M. Return of spasms; head and trunk thrown back; throat contracted, and a difficulty of breathing and swallowing fluids; a choking sensation observed; tongue swelled; bowels discharging a watery fluid; a dozen of evacuations during the night; prescribed the following:

℞. Cret. ppt. gr. xv.
Pulv. Doveri, gr. viij.
Hydrarg. submur. gr. j.
Sacch. albi, gr. x.
M. ft. pulv. iv. One every three hours.
Injection of flaxseed tea with twenty drops of laudanum.

27th, P. M. Spasms ceased in half an hour after I left my patient this morning; bowels not been opened since 10 o'clock, A. M.; pulse feeble, feet cold, eyes turned up; stertorous breathing; some of the scabs falling off.

28th, A. M. At three o'clock this morning death closed this most painful and distressing scene. No spasms during the night.

For the American Medical Intelligencer.

ART. II.—ON THE USE OF THE CHLORIDE OF SILVER.

BY J. C. PERRY, M. D.

One of the Resident Physicians of the Philadelphia Hospital.

Philadelphia Hospital, January 27th, 1841.

Dear Sir,—I would call your attention to a preparation of silver (the chloride) hitherto almost entirely unnoticed by physicians, but which I have used for the past eighteen months with such results as lead me to believe it possessed of properties deserving of further investigation.

It must be universally acknowledged, that the nitrate of silver administered by the mouth can never act as nitrate of silver on the system, since any dose which could be ventured upon must, immediately on entering the stomach, be converted into the chloride of silver, from the chloride of sodium of our food, or the hydrochloric acid of the gastric juice.

The chloride must then, a priori, be considered as efficacious equally with the nitrate, while it will be found less uncertain in its effects, more convenient for exhibition, less liable to decomposition, and free from its nauseous taste. It may be given, too, in any dose thought necessary to produce the alterative and tonic action of silver without danger.

In less doses than thirty grains no irritating or manifest effects result. Thirty grains given at once will generally produce emesis. The best form of exhibition is in pill. To children it can be given as a powder suspended in syrup.

Twelve grains administered daily for three months have produced no unpleasant symptoms, and none of my numerous and long-continued courses of the remedy have been followed by discoloration of the skin.

In epilepsy, three grains, given four or five times daily, produced effects similar to those of nitrate of silver, but more marked.

In chronic dysentery, half a grain to three grains thrice daily produces immediate diminution in the number of stools, and tormina, with amelioration in the character of the stools and other symptoms.

I have not ventured to use it freely in acute dysentery, but in the few cases in which it has been administered, its effects seemed equally beneficial.

In chronic and colliquative diarrhœa, benefit was derived from its use in the same doses, but not so markedly, uniformly, or permanently.

The catamenia suspended for years have, without any adjuvant treatment, returned after its free exhibition for two or three weeks.

One case of secondary syphilis (the only one in which it has been tried,) improved rapidly under it.

Such are the results of my experience, and if you think them deserving of your attention, I will prepare the notes of the cases for your inspection.

I am, very respectfully, yours,
J. C. Perry.

Professor R. Dunglison.

For the American Medical Intelligencer.

Art. III.—NOTES ON THE DISSECTION OF AN ALLIGATOR.

BY C. G. FORSHEY, ESQ., OF NATCHEZ, MISSISSIPPI.

Dear Sir,—Agreeably to my promise, I copy for your use a few notes I made in the partial dissection of an alligator, on the 20th April last, with the aid of my respected friend, Dr. Samuel A. Cartwright. I was led to the examination from the circumstance of having noticed a transversion of the heart and lungs, spleen and liver of a very large alligator we had taken, and laid open for the purpose of getting the temperature of his blood at the fountain. The notes, as you will perceive, relate to only a few points, it being inconvenient at the time to complete the dissection.

Glossus muscles and tongue attached beneath the larynx. Larynx three to four diameters of the trachea. Cartilage covering the larynx beneath *single*, and shaped much like the back of a turtle. The capacity of this larynx will sufficiently explain their bellowing, which I have heard nearly two miles. Os hyoides attached on each side at an angle of 45° with line of trachea, depart on each side a semi-diameter of larynx, and having then an elbow or lateral articulation; direction thence parallel with trachea. The sternum a hard cartilage, with a lateral articulation in the centre, which explains their movement in seizing their prey.[1] Relative position of the trachea and œsophagus as in the human body. Very powerful pectoral and brachial muscles. Scapula with a rib attached almost at sternum. Tendon extending from centre of scapula to the clavicle, which is united to the scapula as a single bone, without a joint or articulation. A powerful muscle is attached to the upper part of bones of pelvis, and extending to the viscera, to aid in expanding for the large supplies of air required in swimming rapidly. Heart in centre under trachea. Single ventricle and auricle. Bifurcation of trachea one third of distance between fore and hind feet.

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[1] The habit here alluded to is their sudden lateral motion of the head, neck, and shoulders to meet the prey, which is at the same moment struck with almost irresistible force by the tail. The victim, whether a calf, hog, dog, or deer, is thus disabled by the stunning blow, which drives him into the "dead-fall" mouth of his captor. This power of course is only available on land, and immediately the alligator plunges into the water to strangle the prey, which might otherwise revive from the blow and prove troublesome.

You will permit me, my dear sir, to add another note, which I find in my memoranda made about the same date. It may possess some interest to you, or it may have long since come under your notice, or, finally, it may be of no importance in any respect. Still every truth in science, I hold, possesses sufficient dignity in itself not to appear ridiculous, whether it have any apparent practical utility or not. So much by way of preamble to a note which is itself not longer.

May 24, 1840. Took a syphon tube one fourth inch calibre, immersed the elbow in cold water, and passed a current of my breath through it, at a dew point of about 94, until I condensed some six inches of water in the tube; then, with a very elegant and delicate pair of scales, weighed the contents. I then weighed precisely the same length of column of rain-water from the cistern, at the same temperature; and deduced the specific gravity of the water condensed from the breath, and found it 0.967125.

The experiment was not repeated, but was made in this instance with so much care and precision as to give me no little confidence in the result. Richard H. Lawrence, Esq., aided me in it.

I have the honour to be, with the highest consideration,
Your obedient servant,
C. G. Forshey.

Prof. R. Dunglison, M. D., Secretary to the Amer. Phil. Soc.

Art. IV.—MORBUS BRIGHTII.[1]

Dr. Bright, it appears, took distinct cognisance of the chronic and advanced anatomical conditions of the disease alone; and it follows likewise, from distinct avowal in his pages, that he was dubious as to the precise nature of the connection of the lesions he described. It is true, this observer has figured a distinct example of hyperæmic enlargement of the kidney, attended during life with anasarca and a coagulable state of the urine; but so little comparative importance did he attach to this morbid change, that in the general description of the disease, in his original essay, it is not made the subject of reference, while in his second production, though the complaint is spoken of as commencing with acute symptoms, no cases are related from which the writer's opinion respecting the anatomical state of the organs, where such symptoms exist, may be gathered with precision. The attempt exhibited in the next column to trace a regular catenation of morbid changes from the mere derangement of local circulation to the most advanced disorganisation must, if well founded, confer high distinction on M. Rayer. Now, that the first stage of disease exists, as described by this pathologist, seems established—the statements of others corroborate his account. And it is equally certain that we have here the anatomical evidences of intense congestion, if not of actual inflammation. The enlargement of the organ is the simple result of the stagnation of blood, and it would be not more erroneous to call an erect penis hypertrophous than, with M. Solon, thus to designate the congested kidney.[2] M. Solon, it is true, talks about the blood being already combined with the renal tissue in this stage of the disease, but the alledged fact that the fluid cannot be removed by washing is no proof of this,—more especially as it may be easily expressed. The characteristic feature of the next phasis, the mottled appearance produced by reddish maculæ on a yellowish ground, seen both on the external surface and in the interior of the kidney, is attributed by M. Rayer to the partial disappearance of the previous state of hyperæmia, and its replacement by anæmia. M. Solon conceives, on the contrary, that the yellow tint results from more complete combination of the principles of the blood with the renal tissue, and not from a bloodless condition of the part; an opinion against which the objection already made, and obviously applicable during the first stage, now ceases to bear. In the third, the hyperæmia disappears more completely, the mottled aspect is lost, and a uniform slightly yellowish tint prevails; anæmia is now, according to M. Rayer, general. But, as M. Solon well observes, the term anæmia, which may be very correctly employed in speaking of the state of the kidneys in subjects dying of hemorrhage, is not applicable, in point of accurate description, to the discoloration now referred to. And M. Rayer himself elsewhere lends force to this observation; for he points out (p. 324) its yellow tint as actually distinguishing this condition of the renal tissue from the anæmic kidneys of certain tuberculous subjects. In the fourth phasis the previous state of discoloration still prevails, but the deposition of "Bright's granulations" marks it distinctly; the fifth seems to be a mere modification of this stage. In the sixth, the granulations commonly disappear, and differing in this from all its predecessors, this stage is frequently marked by a tendency to congestion, contraction, or atrophy on the part of the kidney. M. Solon, it will be seen, carries us a step further, and attempts to range all renal, analogous, and heterologous products as an ordinary and necessary sequence of Bright's disease,—a proceeding so utterly irreconcilable with what is known respecting those products, and with the general laws of pathology, that we can only marvel at its adoption.

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[1] Brit. and For. Med. Rev., Oct. 1840, p. 304.

[2] This is a singular notion on the part of a writer of M. Solon's experience. Dr. Christison, however, has no excuse for joining, in his allusion to it, in a habit reprehensibly common both among ourselves, and among foreigners in their references to English literature, namely, in ascribing to a people at large the opinions of individuals; he fathers the present mistake upon the entire community of "French pathological writers."

The anatomical characters of the affection claims our first attention, and in order to exhibit in a distinct manner the similitudes and differences in the descriptions of the four observers who have made them a subject of special study, we shall display these in a condensed form in juxta-position.

BRIGHT. (1827.)

Chronic.

1ts Form. The kidney loses its firmness, acquires a yellow or mottled appearance externally; the same yellow colour, slightly tinged with gray, pervades the cortical substance; the tubular is of lighter colour than natural; the size of the kidney not materially altered; there is no morbid deposit.

2d Form. The whole cortical part is converted into a granulated texture, with copious morbid interstitial deposit of an opaque white substance: the kidney is generally enlarged, sometimes very much so. (The granulations are rendered more apparent by maceration.)

3d Form. The kidney is quite rough and scabrous to the touch externally; and is seen to rise in numerous projections of about the size of a large pin's head, of yellow red and purplish colour. The form often inclined to be lobulated, the feel hard, the texture of semi-cartilaginous firmness: tubular portions appear drawn near to the surface of the kidney.

RAYER. (1837.)

Acute.

1st Form. Kidneys enlarged, their weight may reach 12 oz.; firm, but not hard; surface of a morbid red colour, and studded with small deep red points. Internally, the increased size is found to depend on the cortical substance, which presents a great number of similar points, apparently the Malpighian glands injected. Tubular cones of duller red colour, and their striæ less distinct than natural; pelvis and calices injected.

2d Form. The enlargement persists, with slight diminution of consistence; tendency to lobulation is often observed; mottled appearance from red spots on a yellowish white ground (mixture of hyperæmia and anæmia.) On division, the cortical substance appears swollen, and of pale yellowish tinge, speckled with red; the tubular of a rather bright brownish red.

Usually Chronic, rarely Acute.

3d Form. Size and weight increased as before; no mottling; cortical substance externally and on section appears of a pinkish white and slightly yellowish hue, or paler, and like that of eel's flesh. Small vascular arborisations; and sometimes large white granulations resulting from deposition of plastic lymph.

4th Form. Size and weight as before; external surface smooth, of pale yellow colour, speckled or covered with milky white spots as large as the head of a very small pin; these are found also in the interior of the cortical substance (which is of the same pale colour as in the two previous forms), and aggregated into flocculent streaks.

Chronic.

5th Form. Rarer than the preceding; kidneys as before in point of size and weight; lobules unnaturally distinct; the external surface appears as if a vast number of "grains de semoule" were deposited under the cellular capsule of the organ.

6th Form. The kidney is sometimes larger but often smaller than in health; is hard and presents inequalities or mamillæ on the surface, few or no milky spots (Bright's granulations), but commonly some of these in the interior of the cortical substance. Capsular membrane almost always thickened and very adherent.

MARTIN-SOLON. (1838.)

1st *Degree or variety.* Kidney red, hypertrophous, enlarged and heavy,—especially cortical substance; the tubular is also of deep red colour, but not hypertrophous; the blood combined with these tissues cannot be removed by washing; the renal substance is friable and marked with red or blackish stellate points,—probably ecchymoses.

2d. Tissue still hypertrophous, presents a yellowish striated or mottled appearance; the sulci marking the divisions of the kidney in infancy are sometimes manifest; the tubular substance is slightly hyperæmic.

3d. Kidney almost always hypertrophous, a state still depending on cortical substance; the external surface generally smooth, sometimes presents inequalities. Surface of a pale yellow hue, something like that of the pancreas, as likewise is the substance of the kidney internally; the cortical substance appears to penetrate between the radii of the tubular; and these latter have in some measure disappeared or tend to become of a pallid colour. The tissue is soft, but to a certain degree friable, though it resists laceration somewhat.

4th. The kidney presents the yellow appearance just described; and besides white pultaceous creamy particles, apparently produced by interstitial exhalation on the surface and in the substance of the organ (Bright's granulations.)

5th. Kidney, in addition to the anatomical characters of Bright's disease, contains some form of adventitious product (cysts, tubercles, carcinoma, &c.)

CHRISTISON. (1839.)

1. *Incipient stage.* A minor degree of the second stage,—namely, of the deposition of a grayish-yellow, obscurely granular matter in the cortical structure, with or possibly without some degree of sanguineous congestion.

2. *Middle stage.* The deposition of granular or cheese-like matter, the only important and well-established anatomical character of the morbid formation, seems at first to be, for the most part, chiefly confined to the cortical substance.

3. *Advanced stage.* The morbid deposition gradually pervades the tubular substance.[1]

Now, it must be admitted that the gradations of disease here described seem naturally and closely connected, as far as the fourth; and though it may be difficult to demonstrate the link between the yellowish discolorations, &c. and the deposition of the granular matter, the fact is no less important, that such deposition does not probably occur until the tissue of the kidney has, with greater or less rapidity, passed through the previously described phases. Should a suspicion arise that accuracy has been sacrificed to zeal for systematic arrangement, this may be dismissed with the reflection that each of these forms of disease, with its special characters, has repeatedly been observed by writers who entertained no particular view respecting the mode of relation of the series. The sixth stage of M. Rayer acknowledges its connection with its predecessors by the occasional presence of the milky granulations. Such then may, in the present state of knowledge, be fairly admitted to be the mode of progress of this disease under ordinary circumstances, and when its evolution is regularly accomplished. But it must not be forgotten that, in many instances, we are without any direct proof from anatomy, or collateral evidence from symptoms, that the disorder has originated in active congestion: the morbid changes appear, indeed, to advance so insensibly, as almost to exclude the notion of an irritative process having existed in the affected organ.

In our arrangement of M. Rayer's *forms*, we have shown the presumed connection between the anatomical lesion and the acute or chronic course of the symptoms. The acute affection has most frequently been witnessed in children as a sequence of scarlatina, especially according to M. Rayer, in certain epidemics, but also occurs in adults independently of any exanthematous disorder. In these cases it appears with the ordinary character of a febrile disease, is attended commonly with sickness and vomiting, and characterised by certain remarkable changes in the constitution of the urine and blood, and by effusion of serosity into the cellular membrane, or more rarely, into the serous cavities. The urine is, at this period, always acid, and voided in small quantity; it is at times, according to Dr. Christison, altogether suppressed, but there is little evidence of this in his reported cases, and of the nature of one of those (No. 1), apparently justifying the statement, serious doubts, as we shall presently see, may be very fairly entertained. The colour of the fluid is reddish or deep brown, depending on the presence of more or less blood; this is in rare cases so abundant as to be voided in small clots. We have already alluded (vol. viii, p. 128,) to the dissent between observers respecting the specific gravity of the urine in this affection. M. Rayer now somewhat modifies his former statement on the point, by affirming that the density is *often* above and *rarely* below the healthy standard. The average of six cases, observed by himself and Dr. Bright, gives 1028; and if, as he remarks, intercurrent inflammation of other organs arise, the density increases still further. Dr. Christison's statements on this point are deficient in explicitness; for at page 34 he asserts that "the density now lies within the limits of health," while at page 48 we find "a moderate reduction" of specific gravity recorded among the pathognomonic characters of the incipient stage. M. Solon has on his side fallen into the serious error of omiting to distinguish, in speaking of the density of the fluid, the periods of the disease at which the observation is made. There can be no doubt that the specific gravity is comparatively high at the outset of the complaint, a fact explained by Rayer by the simple consideration that the ratio of the solid to the aqueous constituents of the urine is at this period scarcely affected. Dr. Christison, who maintains that the proportional quantity of solids is already lessened, refers the high average density to the adventitious albumen which is present, strengthening this opinion by the allegation that "if the fluid be filtered after coagulation, the density falls by four, five, or even seven units." But here is a most fallacious argument; for the process just mentioned separates, not only the albumen, but also always a portion of urea, and frequently a large share of mucus or blood-globules, of lithic acid, and lithate of ammonia, (*vid.* vol. viii. pp. 135-6.) The old mode of clarifying coffee might have reminded Dr. Christison of this fact. We are therefore disposed to agree on this point with M. Rayer. Every one will of course grant Dr. Christison that, as the quantity of urine discharged is commonly below the normal average, the total amount of solids excreted therewith in the twenty-four hours falls below the healthy standard; but the estimate that it falls to one fourth or one sixth of the ordinary mean is not to be confided in, as the error just referred to must have influenced this calculation also.

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[1] Dr. Christison also believes that the following appearances "ought to be distinguished with the view of afterwards tracing their relationship. 1. Congestion of the kidneys with or without some granular deposit in their substance. 2. True granular degeneration of the cortical or tubular structure; *a*, finely granular; *b*, botryoidal. 3. Degeneration by a smooth homogeneous yellowish gray mass, intermediate in consistence between that of the liver and that of the brain. 4. Disseminated tubercles. 5. Induration of semi-cartilaginous hardness. 6. Atrophy, with disappearance of the proper renal structure, and with or without one of the previous morbid states. 7. Simple anæmia."

Examined under the microscope, the urine is seen to contain blood-globules in numbers, occasionally mucus-globules, and always lamellæ of epithelium; at this stage crystals of uric acid are rarely observed. The sanguinolent appearance may obtain for two or three days, or more, and sometimes recurs after disappearance; the degree of bloody impregnation varies from time to time, as that of the albuminous, and the abundance of the latter is not at all in the direct ratio of the former. The quantity of albumen discharged varies not only in different patients, but in the same subject from day to day, nay, even from hour to hour. Dr. Christison affirms that it is always abundant during this stage, but may suddenly disappear temporarily; Rayer has "often" found the pale urine of the chronic malady "much more highly albuminous" than the deep red fluid voided in the acute stage.

The renal regions are commonly the seat of dull, rarely of acute pain. Dr. Christison speaks of frequent desire to pass urine, accompanied with difficulty or pain in the act, as existing at this period: M. Rayer affirms that these phenomena are never present except there be coexisting disease of the bladder, or fibrinous concretions of large size present themselves at the orifice of the urethra. The retraction of the testicle and pain in the direction of the ureters, sometimes observed in simple nephritis, do not appear to exist in this affection. Scarcely have the morbid changes of the urine been established, when anasarca supervenes, ordinarily commencing by puffiness of the eyelids or face, in other cases originating in the limbs, and characterised by tenseness of the skin and the absence of pitting under pressure.

To the frequency of buffiness in blood drawn at this period of the disease, we have the testimony of all observers who have written on the subject. The specific gravity of the serum diminishes from the decreased proportion of its albumen, and may fall from 1030, the normal mean, to 1022, or even 1020 or 1019. Rayer states that the natural state may return a few days after venesection, provided that operation have rendered the urine less albuminous than it had previously been. The serum is sometimes lactescent from admixture with fatty matter removable with sulphuric ether. According to Dr. Christison, "the presence of a large quantity of urea" in this fluid may be ascertained during the present stage, provided the amount of urine have not been considerably increased by incidental causes beyond what constitutes the common average at this period. MM. Rayer and Guibourt sought unsuccessfully for albumen in two instances during the first stage. Negative evidence will not, in circumstances like these, more especially as

M. Rayer does not mention the quantity of urine daily discharged, counterbalance the positive assertion of Dr. Christison. But his proposition appears open to attack on other grounds. In truth, on turning to Dr. Christison's collection of cases, we find not a single one conclusive of the alleged fact. Cases i. and xx. are probably those to which the author would direct our attention; but that the former was a case of Bright's disease at all may be doubted; and as death did not occur in the latter, the precise state of the kidneys can only be matter of conjecture; but that it was far from being exactly such as the narrator of the case would infer appears from the following considerations: The subject whose history is therein given had had anasarca twice previously, twenty years and five years before he presented himself at the Edinburgh infirmary. Granted that he had in the interval been in apparent possession of good health, and that his last attack supervened with acute symptoms; where is the proof that the man had not been voiding albuminous urine for months, for years,—in a word, that the disease had not in the interim been following a latent course? Does not Dr. Christison here fall into the very error against which he himself, even more emphatically than his coadjutors, in the investigation of this disease, warns others? Does he not totally forget the existence of his own 28th, 29th, and 67th pages, where he says there are many cases where, although the disorder may *appear* to have begun as an acute affection, traces will be found of its having existed for several months before in a chronic form; [where is this more likely than in a case where there had been at least two distinct attacks previously?] and further relates that the kidneys of a stout, muscular, and healthy woman, who had been killed in a squabble, were found "very far advanced in granular disorganisation." Had this woman been the subject of an acute intercurrent attack before death, and fallen under the notice of Dr. Christison, her blood would have furnished an excellent example of impregnation with urea "in the incipient stage of the affection." But, again, Dr. Christison's mode of satisfying himself of the presence of urea in some cases, may have its share in inducing the discrepancy of opinion referred to. It appears that he considers effervescence, with evolution of an urinous odour by the action of nitric acid on the alcoholic extract of the solids of the serum, a satisfactory proof of the presence of urea. Now, Lecanu,[1] and Brett, and Bird,[2] have shown that the peculiar odour in question is evolved when a certain extractive matter of the blood, wholly distinct in nature and properties from urea, is thus treated. Besides, MM. Guibourt and Rayer have ascertained that small solid masses, simulating the nitrate of urea in sensible properties, may be obtained by the reaction of nitric acid on certain alcoholic extracts of the serum. The proportion of fibrine now varies, according to Dr. Christison, from 82 to 30 parts in 10,000,—a tolerable proof of the insignificance of its ratio as an evidence of the presence of the disease; even in health the quantity of fibrine is subject to very extensive variation. Dr. Christison believes that the ratio is, in Bright's disease, "regulated by the amount of buffiness of the blood;" but M. Rayer well reminds us that, as Denis has shown, the quantity of fibrine cannot in other diseases be calculated by that of the buff. The proportion of hematosine is stated by Dr. Christison to be undecreased in amount during this stage. His calculation really refers to the globules and not to the hematosine; he himself appears to consider them the same thing.

The disease may terminate by recovery, by death, or by passing into the chronic forms. The former termination is announced by abundant sweating, by marked increase of discharge from the kidneys, with restoration of the natural characters of that discharge, and disappearance of the dropsical effusion. When the disease proves destructive to life, the fatal issue is generally preceded by cerebral symptoms, or by thoracic inflammation. If the complaint subsides into the chronic state, the patient may recover the general appearance of health, and no sign of morbid character be present except albuminous impregnation, a point, practically speaking, of the greatest importance. This state may have continued for a variable period, when a new attack of dropsy occurs, the disease assuming the aspect of an acute disorder. A fact upon which M. Rayer insists is, that in individuals of a habit rendered cachectic by disease, or by default of healthy nourishment, the disease may wear a chronic character *ab initio*, from the absence of marked symptoms of reaction, and yet the kidneys display on inspection the anatomical characters, though in an ill-marked form, of the acute complaint. And it is also a well-founded remark of this observer, that with each recurrence there is a stronger tendency exhibited to the chronic character, though, as we have just had occasion to hint, this is a rule not without its exceptions.

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[1] Brit. and For. Med. Rev., vol. vi. p. 433.

[2] Med. Gaz., vol. xii. pp. 494, 567, 805.

In the chronic, as in the acute disease, the state of the urine and of the blood, and the presence of serous effusion, furnish its principal signs; there is rarely distinct pain or tenderness under pressure in the renal regions. The urine is sometimes voided more frequently than in health. Dr. Christison dwells forcibly upon the diagnostic importance of the patient's "being awakened once or oftener in the night-time by the necessity of passing urine;" an evident proof how completely Dr. Christison's mind is engrossed by this affection, for there is probably not a single irritative state of any part of the *lower* portion of the urinary passages especially that is not productive of similar discomfort. The same writer observes, that the quantity of urine is often very little reduced below the standard of health, frequently it rather exceeds than falls short of it, but if an acute attack supervene, or if the chronic disorganisation "has been allowed to go on to an excessive extent, without the disease being cut short, as more usually happens, by some fatal secondary affection," it may diminish to almost total suppression: in a case of the latter kind, "the quantity, for nine days before death, did not exceed an ounce." This fluid is now commonly slightly acid, occasionally neutral or alkaline. M. Solon remarks that alkalescence cannot depend on the presence of ammoniacal carbonate, on account of the freedom from fetid odour, or from effervescence under nitric acid, and ascribes it to the sodaic salts of the serum, which find their way into the urine along with its albumen. Were this, however, a perfectly correct explanation, we should expect to find alkalescence in the direct ratio of albuminous impregnation, which is far from being the fact. The density of the urine is now invariably low, and may fall to 1004, an effect produced by diminution of its solid constituents. It is not known in what proportion this diminution affects the urea and salts respectively: M. Solon has pointed out the deficiency of calcareous salts. The fluid is pale, with scarcely any urinous odour; occasionally turbid, contains lamellæ of epithelium, and, as its chief characteristic, a variable quantity of albumen. Its sediment sometimes contains mucus-globules or blood-globules, and small crystals of lithic acid; in very rare cases some pulverulent lithates are discoverable; the phosphates also are present in very feeble proportion. The slight muddiness or turbidity occasionally observed is, according to Dr. Christison, "probably owing to modified vesical mucus," but it may also depend on the suspension of fatty matter removable with sulphuric ether, as shown by Rayer. Respecting the relative amount of albuminous impregnation in the two stages of the disease, authors vary. Dr. Osburne relates that the extent of disease discovered after death has been, according to his experience, invariably in proportion to the degree of coagulability. Rayer has found the "quantity of coagulum often greater in the acute than in the chronic disease," the whole sample of urine acted upon sometimes forming into a mass; in others, slight opalescence only being produced. It appears clearly from his chapter on the "progress of the disease," that M. Solon holds an increasing proportion of albumen to be indicative of advancing disorganisation. Dr. Christison's "observation leads to the inference that the albumen abounds most in the early stage, decreases towards the advanced stage, and when abundant in the latter period, is so *incidentally from the supervention of fresh reaction.*" We confess ourselves unable to account for the difference of opinion here exhibited, unless the proposition printed in italics afford the clue thereto.

Meanwhile, what is the state of the blood? As may be anticipated from what has just been said respecting the urine, contradictory notions are held on this point. If we credit Dr. Christison, "the density and solid contents of the serum, previously much reduced, gradually return to the healthy standard, or even exceed it;" in the middle stage, the density is said to be about 1024; in the advanced, it may be so high as 1031. The proportion of the solid constituents of the serum is, on the contrary, according to Rayer, remarkably lowered to such a degree, that he has found the specific gravity fallen to 1029, 1019, and even 1013. It will be observed, that in both instances the density of the serum is inversely as the different proportional quantity of albumen presumed by each of these writers to be passed with the urine; each of these has at least the merit of consistency. On this subject M. Rayer remarks, "*if* by beginning of the disease Dr. Christison understand the end of the first, or the course of the second month of the complaint, the diminution in the density of the serum is beyond a doubt sometimes very considerable; *if* by middle stage he designate cases in which, in consequence of amendment in the patient's state, a decreasing quantity of albumen is discharged with the urine, this statement is still correct. But the diminution of albumen in the urine and augmented density of the serum, stated by Dr. Christison to be the ordinary characteristics of the final stage, appear to me to be of completely exceptional occurrence." (Vol. ii. p. 122.) Your *if* would then fain be a peacemaker among pathological wranglers; but in this instance, at least, its pacific efforts fail, as Dr. Christison does not distinctly state any thing of the kind alluded to. Nevertheless, there may be some share of justness in M. Rayer's supposition, for, judging from Dr. Christison's published cases, it may be questioned whether this practitioner has had an opportunity of observing a single indisputable example of Bright's disease in the truly acute stage; an idea which receives corroboration from the fact that he himself places "granular deposition" among the anatomical characters of the very earliest stage. Again, these observers differ: the Parisian writer has found the lactescent appearance of the serum now more marked, the Scottish less so, than in the outset of the disease. They agree, however, in stating the quantity of cruor to be commonly diminished and that of serum increased; and coincide in considering the proportion of globules diminished: M. Rayer has determined the latter point by microscopical examination; Dr. Christison ascertained by chemical analysis that the ratio may sink to less than a third of the healthy average. The fibrine is now, according to the latter observer, most commonly natural in amount. But here the uniformity of opinion ceases. According to Dr. Christison, the urea "*frequently* disappears from the serum of the blood as the disease advances;" while M. Rayer affirms that this proximate principle may be *more frequently* detected in the chronic than in the acute stage. The Edinburgh Professor modifies the above opinion so materially in the very sentence in which it is announced, as to involve, at the least, a contradiction in terms: "in the most advanced stage," he says, the urea *commonly* reappears, and it is sometimes present towards the close in larger proportion than ever." The variation depends, it is alleged, on the varying quantity of urea excreted by the kidneys; whenever this is materially reduced, the principle in question may be distinctly found in the blood.

The characters of the anasarca which forms an almost invariable attendant on this stage of the affection are sufficiently well known. But respecting the importance of anasarca as a symptom there is some difference of opinion. The French describers of Bright's disease, struck with its extreme frequency, rank it among the regular symptoms of the affection; Dr. Christison, influenced by its occasional absence, lowers it in importance to that of a mere secondary affection. If the arrangement of Dr. Christison be more scientific, (this, however, may be doubted, for we are not aware that the signification of the phrase "secondary affection" has ever been defined with precision,) that of the French authors is much more practically useful, inasmuch as less danger is to be apprehended from slight exaggeration of the frequency of the condition in question, than from underrating the constancy of its occurrence. Dr. Christison upbraids the continental writers on the subject with "incorrectly considering anasarca an essential character of the disease;" but the accusation is a groundless one: M. Solon (p. 267) recognises the occasional absence of anasarca as an ascertained fact; M. Rayer has figured the kidneys of individuals who had not suffered from this symptom, and M. Forget published a similar case. Whatever be the term applied to indicate the connection of anasarca and the renal lesion, the important point to remember is, that the former is scarcely a less frequent attendant on the latter than, for example, cough on phthisis.

The volumes of MM. Rayer, Solon, and Christison contain numerous reports of cases in justification of the general statements broached by their authors. We have much satisfaction in perceiving in those of the latter writer a very distinct improvement upon the ordinary style of records of the kind published in this country; and though numerous defects both of matter and manner might easily be pointed out, we shall, in compliment to the general superiority of the whole, suffer these to pass without particular notice. M. Rayer's cases are divided into two grand sections: the first exhibiting the characters of the uncomplicated disease; the second illustrating its multitudinous relations of cause and effect to certain organic and functional maladies. In his commentary on these cases, the author examines some of the most important questions connected with the general pathology of the disease. Opportunities of ascertaining the condition of the kidneys in the truly acute stage have rarely occurred, and from the statements already laid before the reader, it follows that in the present state of knowledge there can be little surety in many instances respecting the stage of the disease from the evidence of symptoms. Besides, in respect of other renal affections, the diagnosis of the early stage of Bright's disease is any thing but satisfactorily established. In proof of this, it is sufficient for the present to state, that two cases, reported by M. Solon as distinct examples of the incipient affection, are regarded by M. Rayer as cases of inflammation of the pelvis, of the kidney and bladder: that Dr. Christison's case i., put forward as exhibiting "a characteristic example of the early stage of granular disorganisation," is by the same French writers esteemed a case of *simple* nephritis, attended with typhoid symptoms; and again, the patient of the Edinburgh author's case xix., supposed by him to have been the subject of the early stage of Bright's disease, is by M. Rayer maintained to have suffered from simple hematuria. In many cases of acute dropsy, with coagulable urine, and this more especially where renal pain coexists, the kidneys are probably the seat of such congestion as would ultimately lead to the special disorganisation, but it would be no easy task at present to demonstrate this, as the following paragraph will show. In the infancy of our acquaintance with a disease, we can rarely acquire scientific certainty of diagnosis unless with the assistance of the scalpel. M. Solon adds one distinct example, with the dissection, of the incipient stage of the disease, to that published by Dr. Bright; M. Rayer three or perhaps four of the same kind.

[To be continued.]

BIBLIOGRAPHICAL NOTICES.

Hare's Compendium of Chemistry and Electricity.[1]

These useful volumes, from the pen of one of our ablest chemists—well known in Europe as well as in this country—must greatly facilitate the progress of the student in the agreeable and important departments of chemistry and electricity. The facts and doctrines are clearly expressed, and the text is elucidated by appropriate woodcuts. The works are well adapted, not simply for the tyro in chemistry, but for every one who is desirous of being on a level with the state of the sciences investigated in their pages.

Professor Drake's Introductory Lecture.[2]

The grounds assigned by the able and veteran author and teacher for consenting to the publication of this appropriate introductory discourse are—first, that it may do something towards promoting the study of pathological anatomy in the west and south, and perhaps aid the student, after graduation, in the prosecution of clinical observations; and secondly, that its publication might contribute to make known the fact, that the professors of the Louisville Institute had erected an amphitheatre in which the examination of patients can be conducted in a manner far more advantageous to students of medicine than in the wards of the hospital.

The whole address is appropriate, and characterised by all the intellectual vigour of the author.

Tweedie's Library of Medicine.[3]

The volume before us is the third of Tweedie's Library of Medicine. The two first we have already noticed. The present is at least equal to its predecessors. We are disposed, indeed, to regard it as superior to the first volume, the articles in which are more unequal than in any of the others.

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[1] A Compendium of the Course of Chemical Instruction in the Medical Department of the University of Pennsylvania. By Robert Hare, M. D., Professor of Chemistry. In two parts. Part I. comprising the Chemistry of Heat and Light, and that of Inorganic Substances, usually called Inorganic Chemistry. Fourth edition, with amendments and additions. 8vo, pp. 370. Philadelphia, 1840.

A Brief Exposition of the Science of Mechanical Electricity, or Electricity Proper, subsidiary to the Course of Chemical Instruction in the University of Pennsylvania, with engravings and descriptions of the apparatus employed. By Robert Hare, M. D., Professor of Chemistry. 8vo, pp. 80. Philadelphia, 1840.

[2] An Introductory Discourse to a Course of Lectures on Clinical Medicine and Pathological Anatomy, delivered at the opening of the new Clinical Amphitheatre of the Louisville Marine Hospital, Nov. 5, 1840. By Daniel Drake, M. D., Professor of those branches in the Medical Institute of Louisville. Published by the Class. 8vo, pp. 16. Louisville, 1840.

[3] Dissertations on Diseases of the Organs of Respiration. By C. J. B. Williams, M. D., &c., Professor of the Practice of Medicine, University College, London; Theophilus Thomson, M. D., Physician to the Northern Dispensary, &c.; W. B. Carpenter, M. D., Lecturer on Forensic Medicine in the Bristol Medical School, &c.; W. Bruce Joy, M. D., Fellow of the King's and Queen's College of Physicians in Ireland, &c. Edited by Alexander Tweedie, M. D., F. R. S., &c. &c.; with American Notes and Additions. By W. W. Gerhard, M. D., &c. &c.

Having consequently spoken favourably of the two first volumes, we can unhesitatingly recommend this also to the attention of our readers. It is replete with interesting practical instruction.

MISCELLANEOUS NOTICES.

Pennsylvania Asylum for the Insane Poor.—It affords us heartfelt pleasure in being able to state that the bill for the establishment of an institution for the insane poor has passed the legislature by an overwhelming majority, and has received the sanction of the governor; so that it is now a law. It is a glad triumph to those whose philanthropic exertions have been instrumental in the result; and a bright spot in Governor Porter's administration.

Albany Medical College.—The number of students, as per catalogue, was 122 during the last session. The number of graduates was 29.

Vacant Chair in the Medical Department of the Transylvania University.—The chair of the theory and practice of medicine in the medical department of the Transylvania University is at present vacant, and with a view to fill it in the best possible manner, applications for the appointment are invited from the members of the medical profession.

The communications on the subject must be addressed to the *Dean of the Medical Faculty of T. U.*, and come to hand before the first of June next, when the appointment will be made. The name of no one but the successful candidate will be made public.

Jefferson Medical College of Philadelphia.—At the annual commencement, held on the 6th of March, the degree of doctor of medicine was conferred on *fifty-six* graduates. The honorary degree was granted to *one*. The names will be given in our next.

Pennsylvania College, Medical Department.—At the annual commencement of this institution, held on the 2d of March, the degree of doctor of medicine was conferred on *thirty-nine* gentlemen. Besides these, *three* received the honorary degree of doctor of medicine.

Spring Course of Lectures at the College of Physicians and Surgeons, New York.—An association has been formed, for the purpose of offering to the students of medicine in New York a course of instruction, which, it is hoped, may profitably occupy a portion of their time during the ensuing spring and summer.

Lectures will be delivered at the College of Physicians and Surgeons, in Crosby street, on the following subjects:—

On the pathology of the chest, auscultation, and percussion, by John A. Swett, M. D., lecturer on diseases of the chest. This course will be fully illustrated by clinical cases.

On club feet and analogous deformities, by —— Detmold, M. D.

On the diseases of the kidneys, by Wm. C. Roberts, M. D.

On the diseases of the eye, by G. Wilkes, M. D., surgeon of the New York eye infirmary. Clinical instruction at the infirmary.

On the pathology of the uterus and its annexes, by C. R. Gilman, M. D., lecturer on obstetrics and the diseases of women and children in the College of Physicians and Surgeons.

On operative surgery, by W. Parker, M. D., professor of surgery, College of Physicians and Surgeons.

On the anatomy of the nervous system, by James Quackenboss, demonstrator of anatomy.

On surgical anatomy, by R. Watts, Jr., M. D., professor of anatomy, College of Physicians and Surgeons.

The lectures will commence on the first Monday in April, and continue about three months. Two lectures will be delivered daily. Hours, from one to three o'clock.

The fee for the whole course is ten dollars—a movement downwards in the rate of fees which does not meet our approbation.

Dissection of a Club-Foot.[1]—Sir, I enclose you an account of the dissection of a case of club-foot, in which the sole was turned inwards and upwards, the patient treading on the upper surface of the os cuboides, which had become rough and irregular, giving rise to an extensive ulceration on the instep, for which the limb was amputated; but the case did not do well, owing to the formation of abscesses in the thigh, and a subsequent attack of hemiplegia. I am, sir, your obedient servant,

PHILIP B. AYRES, M. D., M. R. C. S.

Thame, November 27, 1840.

Tendo achillis very much shortened, preventing flexion of the ankle-joint.

Tendon of the tibialis anticus very short, preventing eversion of the foot.

Tendon of the extensor longus pollicis rather shortened, but nearly natural.

Tendons of the extensor longus digitorum natural.

Tendon of the peroneus tertius elongated and expanded.

Extensor brevis digitorum flabby and very thin, but otherwise natural.

Tendon of the flexor longus pollicis rather shortened.

Tendons of the flexor longus digitorum somewhat shortened, but very slightly so.

Tendon of the tibialis posticus slightly shortened.

Tendons of the peronei natural.

Short muscles of the foot natural.

The bones of the foot, although the patient was 27 years of age, and the disease congenital, were apparently in a natural state, and would certainly, judging from their appearance, have allowed the foot to have regained its natural position had the opposing tendons been divided. The principal opposing tendons were those of the gastrocnemii and soleus, and the tibialis anticus, so that by dividing these tendons, the remainder, which were nearly in their natural state, would have permitted the foot to have righted itself. I am not aware that there is any novelty in this case; but as in new operations every fact possesses some value, I have sent this dissection for publication.

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[1] London Medical Gazette, Dec. 11, 1840, p. 448.

THE

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For the American Medical Intelligencer.

ART. I.—CASE OF PNEUMONIA SUCCESSFULLY TREATED BY LARGE DOSES OF TARTAR EMETIC.

BY JAMES H. MAY, M. D., OF WENTWORTH, NORTH CAROLINA.

Dr. Dunglison,

I was called on the 12th of September, 1840, to see Green, a negro boy, the property of Mr. Samuel H. Walker, of Rockingham county, N. C. The boy lives where the various types and grades of bilious fever are very prevalent; and this season the neighbourhood was exceedingly subject to bilious remittent. This boy had complained of feebleness and indisposition for some days previous to the 7th inst., which led to the belief that he was to be a subject of the disease then prevailing. On the 7th at night he was very active hunting, and in a profuse perspiration lay down on the ground late at night (which was nearly frosted) and slept till day. From this time he was prostrated. On the 12th, when I first saw him, he was labouring under typhoid pneumonia; these were the symptoms:—frequent cough, with no expectoration; pain on inspiration; and pain on pressure through the whole chest, particularly on the right side; breathing short and hurried; skin of a pungent warmth, and dry; occasional delirium, with that sharpness and quickness peculiar to such cases; pulse 120, rather small, soft, and feeble; bowels very active from having been purged too much before my arrival; tenderness of the epigastrium, with an irresistible desire to throw back his head; tongue thickly coated with yellow, of a fiery red beneath, and dry on the tip. Although I considered it doubtful whether I should take blood at the arm, yet the pulse appeared to have sufficient firmness to bear it. I bled him between 8 and 10 ounces; prescribed small portions of calom. and pulv. Dov. every two hours, and an expectorant and sedative mixture every four hours of spts. nitre, paregoric, and ipec., and applied a large blister, covering the epigastrium and lower part of the chest.

14th Sept., afternoon, saw him; something better, pulse 110, rather more full; delirium less; some expectoration, though very bloody and yellow; blister had drawn well, and bowels were more quiet; otherwise he was pretty much the same. Cupped him extensively round the chest, but did not get much blood from the want of free capillary circulation. Other prescription of the 12th continued.

15th, at night, sent for; much worse; pulse above 115, smaller and feebler; bowels again become very active; more constant delirium; remarkable shrinking away of the flesh; countenance haggard; expectoration small in quantity, painful, and of the same colour; tongue dry, one side where the fur had worn off, smooth, dry, and *glazed;* skin of that warmth termed *calor mordax.* Cupped him again, without much blood; applied a blister over the right side of the chest; continued the other medicines, with lessening the cal. in the powders and increasing the ipec. in the drops.

16th. Remained over night; still worse; spent a restless night; pulse above 120, more contracted; constant delirium; idle talking and imaginary sights; still greater shrinking of the flesh; features sharp and haggard; hippocratic countenance; expectoration small in quantity and extremely bloody; tongue dry and parched, a portion of it smooth and *glazed;* articulation difficult; restlessness and jactitation; breathing short, with the tracheal rattle. In this state of things I should have pronounced him hopeless under the usual practice; his rapid decline since the 14th showed how futile my practice had been, and indicated, I thought, how utterly useless the ordinary practice would still be if pursued. In this dilemma what was to be done? The practice of giving repeated emetics, after the manner of Riviere and Stoll, and the Italian practice of giving large doses of tart. emet., so highly extolled by Laennec (the highest authority), occurred to me. He was, I thought, too feeble to pursue the former with the least hope of success, and there appeared to be as little hope of success with the latter. But the account of Laennec, in his chapter on Peripneumony, of his remarkable success in patients thought to be moribund, determined me to make trial of the latter remedy, without the least expectation that it would succeed. His usual practice was to give one grain every two hours till he gave six grains, then to rest twelve hours; but my recollection not serving me well on this point, I gave him *four* one grain portions at intervals of two hours, attending to its exhibition myself. After the two first grains he vomited once a considerable portion of green bilious matter; save this he took the four grains without any other evident effect but that of great sickness of the stomach. I left him this evening, ordering the same course to be pursued the next day, of giving the tart. emet. in an infusion of common tea, the best vehicle I had at hand, suspending all other medicines while doing this.

18th. Saw him at one o'clock; astonished at his improvement; pulse 85, more full and soft; cerebral congestion and delirium completely gone; countenance more natural; expectoration easy, and without pain; tracheal rattle gone; breathing more full and slower; tongue inclined to be moist; skin a more natural warmth; in short, every symptom showing a removal of cerebral congestion and resolution of inflammation in the chest.

Yesterday, the 17th, I was informed the tart. emet. purged him excessively, so as to produce syncope, and induce the attendants to believe he was dead. They gave him some laudanum and camphor, which checked his bowels and revived him; at the same time a slight moisture appeared on the skin. After prescribing a pill every four hours of opium, ipec. and calomel, with occasionally an expectorant mixture, I left him with the hope now that he would get well.

20th. Still improved; every symptom indicating convalescence. But on this day there appeared on the surface of his body a great many blisters about the size of a grain of corn, and larger; some contained a fluid clear as water, in others it was turbid; and there appeared under the angle of the left jaw a large tumour, which became an abscess, was ultimately lanced, and discharged a great quantity of matter. I left directions to keep his bowels regular, to use gentle friction with dry flannel; prescribed wine and wine whey and a proper diet.

24th. Saw him again; he had still mended. The course prescribed on the 20th pursued, under which he improved so much that he was able to walk across the house; when, on the 2d October, he was taken with epistaxis, and bled much till near night, when it was checked by cold applications to the neck, head, and scrotum. At one o'clock on the morning of the 3d it commenced again, and bled till four o'clock, P. M., when I saw him, having been absent from the county till then. He had bled a great deal, from the feebleness of his pulse and the disposition to syncope; his nose was then dripping slowly. Sulph. acid. dilut. and a solution of sulphate copper was directed to be injected into the nose *pro re natâ*, and a pill of two grains sugar of lead and one fourth grain of opium given every two hours, which on the 4th succeeded entirely in stopping the hemorrhage.

8th Oct., prescribed friction with dry flannel; mild aperient pills when necessary; barks and wine, and properly regulated diet; and now, on the 20*th* Oct. the boy is well, and has but to get his flesh and strength.

In reviewing the progress of this case, I am struck with the efficacy of the tart. emet. treatment; and so far as one instance goes, it is a complete triumph of the practice. It appears that his system did *not* acquire *tolerance* of the medicine the two days of its exhibition; it vomited him once on the first day, and purged him copiously on the second, besides creating a slight perspiration.

Its effect had been sufficiently salutary I perceived on the 18*th*, and I gave no more. I will here quote a sentence from Laennec as apropos:

"Although copious purging and frequent vomiting are by no means desirable, on account of the debility and hurtful *irritation* of the intestinal canal which they may occasion, I have obtained *remarkable cures* in cases in which such evacuations had been very copious." This, then, was one of the favourable cases which never acquired tolerance of the article, and where the evacuations were copious. The treatment, indeed, snatched him from the grave. I have had numerous cases of pneumonia and pleurisy, and so far as my experience and the experience of other physicians with whom I have conversed show, every patient, when combining the symptoms of this boy's case on the 16th, has died.

The wonder is *now* that I never used it before. I never have, nor has any physician, to my knowledge, in this section of country. It would seem he was about to take the malarious fever there prevailing, but his exposure on the night of the 7th Sept. rendered the thoracic disease predominant,—in fact, made his a case of typhoid pneumonia. There was, when I first saw him, besides inflammation of the lungs and cerebral congestion, considerable *gastric irritation:* but thoracic and cerebral disorder were predominant throughout. In my view the stomach should not be much diseased when the tart. emet. is administered; the irritation in this case did not seem to be so great as to forbid its use. The only appearance of perspiration from the beginning of his sickness till his recovery was on the 17th, on the second day of taking the tart. emet., when he was so sick, and when—I omitted to state—some blood was discharged from his bowels. Might not the blisters which appeared on the 20th be intended by nature as a vicarious perspiration?—at any rate they were novel and unaccountable to me. I have been minute in drawing up this case, but if it shall be the means of saving one from the grave, I shall be amply rewarded. It is a practice but little followed, I believe, in the United States, but I trust it will command more general attention from physicians.

James H. May.

Art. II.—MORBUS BRIGHTII.

Concluded from page 333.

We pass on to the section of M. Rayer's commentary, in which the relation of this disease to other morbid states of the urinary organs are the subject of inquiry. The result of his experience on this matter is extremely important. "I have already," he says, "had occasion to point out frequently the striking analogies between simple and albuminous nephritis. The action of cold and damp produces both diseases. In the acute stage (with the exception of deposition of pus, which has either not been observed at all, or at least very seldom, in Bright's disease,) the anatomical characters are identically the same,—the injection of the kidneys, their increased size, yellow discoloration, &c., are all appearances common to both maladies. In the most advanced chronic stage, the lesions are so precisely similar, that were it not for several circumstances connected with the progress of these affections, the absence or presence of dropsy, and the constant or only occasional presence of albumen in the urine, it would be impossible to distinguish them from each other." But, adds this author, there are striking points of distinction also between these diseases, the only one cited being the marked influence of morbid states of the remainder of the urinary passages or simple nephritis, while these are presumed to be without, or at least to have very slight, influence on the albuminous species. M. Solon considers simple nephritis distinguishable from Bright's disease by the absence of œdema, and the presence of renal pain, nausea, and vomiting. But it must be remembered that Bright's disease, as admitted by M. Solon himself, is not attended in all cases with anasarca, and the symptoms, mentioned as peculiar to simple nephritis, decidedly occur in the so-called albuminous variety. Dr. Christison's experience does not allow him to speak decidedly on the subject, "as simple nephritis is an extremely rare disease in Edinburgh." In the accuracy of the latter statement we see no reason for coinciding; it is a notorious fact that some years since, before renal pathology had excited the attention it has of late done, the persuasion of the rarity of nephritis was universal. We have ourselves heard most eminent Parisian pathologists affirm that they had scarcely ever seen an example of nephritis,—men who now in the short space of a session find abundant materials for lectures on the disease among the patients of a single ward. And again, how Dr. Christison managed to draw the inference from Rayer's works that that pathologist maintains atrophy to be peculiar to and distinctive of the *simple* chronic nephritis, we are at a loss to understand. So far is this from being the truth, that Rayer has actually figured five examples of atrophy as a dependence upon the disease described by Dr. Bright.

The reader is most probably acquainted with the case published by the late Dr. Gregory, (Ed. Med. and Surg. Jour., vol. xxxvi. p. 359,) as exemplifying the production of Bright's disease under the influence of lithotomy: the kidneys are represented to have been mottled, and to have contained internally a considerable quantity of granular matter. This is regarded by M. Rayer as an example of simple nephritis, an affection of most common occurrence under the circumstances described by Dr. Gregory: the mottled appearance is quite as frequent in the latter form of disease as in "albuminous nephritis;" and Rayer is of opinion that the granular matter must in reality have consisted of pus or plastic lymph. The case furnishes an excellent illustration of the necessity of minuteness and accuracy of detail, particularly with respect to subjects of novelty. Albuminuria after lithotomy by no means proves the existence of Bright's disease; Rayer has repeatedly discovered albumen and blood-globules in the urine of subjects suffering from *simple* nephritis and cystitis after that operation.

The correctness of Dr. Christison's diagnosis in several of his reported cases is contested, and not without apparent foundation, by the French pathologist. We have already mentioned that the first case in his work is regarded by M. Rayer as an example of simple nephritis, with typhoid symptoms; the truth is, that renal pathology is so little advanced that it would be presumptuous in us to attempt to decide between these discordant writers, at least in respect of the present question; yet we may be permitted to say, that to our minds there is an *a priori* force in M. Rayer's objection, from the fact that it is—or at least was formerly—too much the practice of Edinburgh to set down as typhoid fever every inflammatory affection attended with typhoid symptoms. Dr. Christison's third and eighteenth cases we fully agree with Rayer in considering examples of common inflammation affecting the bladder and kidneys, and wholly different from Bright's disease. And in his remark that Dr. Christison appears much too prone to infer the presence of granular disease from the occurrence of albuminuria, M. Rayer will, we apprehend, be joined by every one who impartially studies the work of the former. Again, the Edinburgh writer's nineteenth case refers to a subject who had abundant hemorrhage from the urinary passages followed by albuminuria, and is by the narrator considered an example of the special affection; while by M. Rayer it is esteemed an unequivocal instance of essential hæmaturia. Dr. Christison considers (apparently on the authority of Martin-Solon) that "in hæmaturia without granular disease, the urine ceases to contain albumen as soon as it ceases to present the colour of blood:" but his antagonist affirms that he has frequently found the urine in hæmaturia continue albuminous for some time after it had ceased to contain blood-globules, either in suspension or in its sediment.

M. Rayer considers diseases of the bladder, prostate, and urethra without influence on the developement of "albuminous nephritis," and has found that the latter affection rarely induces inflammation in the pelvis and ureters, and still more rarely in the bladder. He seems disposed, however, to admit that diabetes may have some influence in its production. Certain it is, that saccharine diabetes not very uncommonly passes into dropsy, with albuminous urine; but, though Dr. Bardsley declares (Cyclo. of Prac. Med., vol. i. p. 543,) he has observed the lesions of Bright's disease in subjects dying with diabetes, this is not a fact generally recognised, and M. Rayer reports a case (somewhat contradictory of his opinion on this subject stated in our former notice,) serving to show that, as has been alleged by others, the transformation of saccharine into albuminous urine may be a sign of amendment; if such be its import, it is difficult to suppose it an effect of the developement of Bright's disease.

The attention of the observers of this disease has been drawn to its frequent accompaniment by morbid states of the heart. Dr. Bright having found sixty-seven cases of cardiac affection (hypertrophy with or without valvular disease,) among one hundred of the renal disorganisation, infers, without making any inquiry into their relative priority, that the latter invariably acted as the cause of the former: he further undertakes to explain their mode of connection,—"either the altered quality of the blood affords irregular and unwonted stimulus to the organ immediately, or it so affects the minute and capillary circulation as to render greater action necessary to force the blood through the distant subdivisions of the vascular system,"—hence, it is presumed, the occurrence of hypertrophy: we are not informed how Dr. Bright has ascertained that morbid states of the blood produce necessarily the alleged effects, and it is obvious that affections of the valves are in this theory left altogether unexplained. Dr. Christison does not express himself very clearly or decisively as to the relation of the two states of disease, but does not adopt the curious conclusion that the cardiac are always secondary to the renal changes. M. Rayer infers from his own experience that in a very few cases indeed are the lesions of the heart an effect of those of the kidneys; he believes that Bright's disease is, on the contrary, very frequently produced by that of the central organ of the circulation, and has observed slight albuminuria, in subjects affected with hypertrophy or valvular lesions, gradually become intensely marked and attended with the most distinct evidences of the special renal affection. He adds, that albuminuria, existing in subjects labouring under disease of the heart or large vessels, with or without dropsy, is not pathognomic of Bright's disease; that, according to his experience, the urine of such patients may contain albumen, either from the kidneys becoming simply hyperæmic, or without their undergoing any apparent change whatsoever,—thus confirming the original statement of Dr. Darwall. He has even observed two cases of chronic pericarditis attended with discharge of albuminous urine towards the close of life, the kidneys appearing on dissection simply congested; and affirms that the derangement of the circulation consequent on endocarditis may cause the escape of albumen with the urine in cases where no renal lesion of any kind exists.[1] In these instances, the high specific gravity of the fluid, and the larger proportion of lithates and of urea therein contained, are pointed out as peculiarities which distinguish it from the excretion in marked chronic cases of the renal disease.

All these writers coincide in their statements respecting the extreme frequency of bronchitis as a secondary disease. M. Rayer observed it in seven eighths of his cases. It is sometimes attended with very copious secretion (bronchorrhœa), and may coexist with vesicular emphysema, and lead to pulmonary œdema, or, it is affirmed, lobular pneumonia. Dr. Bright found "recent or old traces" of pneumonia in one ninth of his fatal cases; Dr. Christison has only observed this complication in two instances; M. Rayer in at least one twelfth of his patients. Reviewing the experience of the four writers, it appears that pleurisy—exclusive of cases in which it evidently depended on pulmonary tubercles or pneumonia—is an affection of rare occurrence in the course of Bright's disease, although the original describer of the latter affection has maintained a somewhat different opinion. The existence of old pleuritic adhesions does not appear to have been more common than in subjects dying of all diseases indiscriminately, with the exception of phthisis. Both Dr. Bright and M. Rayer point out the extreme frequency of pulmonary œdema: both have observed it in one third of fatal cases. But their experience differs respecting the connection of phthisis and the renal disease. Dr. Bright having rarely found them coexistent, and having noticed that in some cases tuberculous disorganisation appeared "to have made a certain inroad upon the upper lobes, and then to have sunk into a state of quiescence, or entirely subsided," is inclined to the persuasion "that so far from these diseases being *associated*, the condition of the body in this form of renal disease is unfavourable to the existence of phthisis." M. Martin-Solon adopts a similar notion. Dr. Christison, on the contrary, maintains that the renal affection sometimes occurs as a secondary disease in the course of phthisis; and M. Rayer advocates the same opinion, on the ground of his having observed every form of the disease—in many instances successively developed in the hospital—coexisting with pulmonary tuberculisation, manifestly of prior developement. He has also observed a certain number of cases in which pulmonary consumption appears to have arisen from the deterioration of constitution induced by Bright's disease.

"With regard to the liver and abdominal viscera generally," remarks Dr. Bright, "as compared with the heart and lungs, a very great immunity from structural disease is to be observed." In the tabular view of one hundred cases drawn up by this author, the liver is stated to have been healthy in forty cases, and in thirty-two others there was merely a mottled appearance, arising probably from disturbed circulation in articulo mortis: in eighteen only were there marks of confirmed disease. Now, as the subjects of these cases were, in the great majority of instances, any thing but sober persons, we have here an argument of no mean force against the prevalent conventionalism respecting the direct influence of intemperance on the liver,—an influence the amount of which has, beyond the shadow of a doubt, been monstrously exaggerated.[2] This result is the more important, as Dr. Christi-

[1] As mentioned in our previous article, Dr. Christison in his pleadings for the diagnostic importance of albuminuria, throws out doubts of the efficient information of the observers who professed that cardiac disease might induce this symptom. He would himself, we doubt not, be now disinclined to push this argument, as Dr. Carswell has meanwhile published an indubitable example of the fact in the Lancet; and M. Rayer reports at length the details of a similar case, in a chapter headed "Albuminous Nephritis similated by Disease of the Heart."

[2] The palmy days of liver pathology are happily gone by,—yet how many victims do we still see salivated almost unto the death for "obstinate hepatic inflammation," assuming the curious shape of pleurisy,—how many tuberculous subjects with wandering pleuritic pains are assured that "congestion about the liver" is the only obstacle to

son talks of conjunction of hepatic and renal disease being easily understood, *because* both are among "the infirmities of the *constitution of intemperance.*" All species of lesion appear to be discovered indifferently in the liver in these cases; it occasionally contains granular matter, assimilated both by MM. Rayer and Christison to that developed in the kidneys.

The lesions observed in the other abdominal viscera and in the intestinal canal need not delay us,—a word, however, on one of the effects of these, diarrhœa. Dr. Christison, speaking of the frequency of this symptom among the Edinburgh sufferers from Bright's disease, wishes to impress his readers with the belief that diarrhœa is comparatively a rare secondary affection in other cities where "*the habitudes* of granular disease" have been made the subject of observation. He is informed by Dr. Bright that it "has never particularly attracted his notice in London," and assured by MM. Andral and Louis that in Paris affections of the bowels are not common. The alleged information from Dr. Bright is not easily reconcilable with the distinct written statement by this writer, that "diarrhœa has carried off several patients, (Guy's Reports, No. ii., p. 339); and as regards Paris, the experience of M. Rayer must be admitted to be more decisive on a question of the present kind than even that of the eminent persons just named; (it is besides not treating them fairly to take the statement here attributed to them *au pied de la lettre*, as misapprehension may easily arise in the verbal transmission of opinion); now, M. Rayer has observed diarrhœa in "upwards of half his patients,"—a diarrhœa remarkable for its intractability, and for its never lessening, no matter how violent it becomes, the amount of dropsical effusion:—far from this, the latter seems sometimes to increase *pari passu* with the former.

"Drowsiness and torpor are common symptoms throughout the whole disease from first to last," and so frequent are affections of the head, "more or less allied to apoplexy," of which death by coma seems the natural termination, unless life be cut short by some other incidental cause, that "it appears not quite correct to consider these affections as secondary." Does Dr. Christison here mean to affirm that such affections are more common than anasarca, which he unhesitatingly ranks with this category? The mode of progression of the torpid state which merges in irrecoverable coma, and proves the immediate cause of death in many cases, is sufficiently well known. Dr. Christison, however, in affirming without qualification that "this secondary affection may occur in the very earliest stage," broaches an opinion of debateable accuracy. At least M. Rayer has found this of singularly rare occurrence, except in cases where the disease follows scarlatina. Dr. C. has attentively studied the relation of the state of the urinary secretion to the cerebral symptoms, and though he admits the general correctness of the common belief respecting the dependence of the latter on suppression or extreme diminution of the former, yet he shows clearly that this is not an invariable fact: "I have known," he observes, "coma form and prove speedily fatal, when thirty ounces of urine were discharged daily up to the time of death; and in case No. 3, the patient passed no more than two ounces of light urine daily for nine days before death, yet he remained sensible to the very last moment of his existence." He has also found that coma is not necessarily connected with the extent or increase of dropsical effusion. In many cases terminating fatally in this manner, the brain and meninges, it is affirmed, present no trace of lesion,—a position which requires the confirmation of numerous and very minutely detailed cases before its precise truth can be admitted.[1] Dr. Osburne speaks of arachnitis as a

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their enjoyment of health,—how often is gastric cancer modified into "mischief going on in the liver,"—and how easily might instances be multiplied in which this *favoured organ* forms the easy refuge of stolid cupidity.

[1] Of course we regard as mere nonentities cases in which the reader is obliged to content himself with the laconic statement—"brain healthy."

common species of disease under these circumstances; and Rayer of subarachnoid serous infiltration as the lesion most commonly discovered, along with occasional superabundance of fluid in the ventricles: from the fluid Dr. Barlow has obtained urea. Hemorrhage into the substance of the brain, into the ventricles, or the cavity of the arachnoid, have been noted by Dr. Bright; but, on the whole, lesions of this latter kind are so exceedingly rare, that M. Rayer is perhaps justified in doubting that there is any real dependence between the two states. The same must, *à fortiori*, be said of the "morbid tumours" discovered in the brain of one of Dr. Christison's patients, but respecting the nature of which "morbid tumours" the details, or rather the want of details, given by the author, scarcely permit even a guess.

M. Rayer has observed several examples of Bright's disease as the apparent effect of pregnancy. Some of these cases were remarkable for the facility with which the disease yielded after delivery to very simple treatment. In certain instances where the disease preceded, or was developed at an early period of pregnancy, it evidently interfered with the evolution of the ovum, and in cases published both by M. Martin-Solon and himself led to fatal abortion.

A very lengthy chapter is contributed by M. Rayer on the connection of "albuminous nephritis" and cutaneous diseases, of which the portion referring to scarlatina is alone really interesting. And in this, rendered heavy by needless prolixity, little is added to previous knowledge; even upon the most debateable point connected with the subject—the anatomical condition of the kidneys in patients suffering after that exanthema from anasarca and albuminuria—it supplies no original information: the latter omission appears to have arisen from a fortunate cause, the mildness of the affection at Paris. Yet it is fair to add that, by collecting the facts scattered through periodical and other works, M. Rayer has placed the reality of the occurrence of the successive stages of Bright's disease, under these circumstances, in a very clear point of view. The existence of dropsy, fever, and the presence of blood and albumen in the urine, which fluid is diminished in quantity and of low specific gravity, are the only safe signs of Bright's disease under these circumstances. Dropsy succeeding scarlatina by no means positively announces renal disorder; besides the possibility of its depending on disease of the heart or great vessels, general dropsy, unattended with coagulability of the urine, has been known to follow scarlatina, and nothing authorises us in ascribing such affection to a lesion of the kidneys,—a fact adverted to by Dr. Christison also in the same strain.

The experience of M. Rayer confirms the opinions of Drs. Hamilton and Christison respecting the influence of a scrofulous habit on the developement of the disease. A case is related by the French writer, in which the urine, though strongly albuminous, contained a large proportion of lithic salts; either the patient, in this instance, was affected with renal disease or not, (she left the hospital soon after her admission); but on either supposition, the constitution of her urine was remarkable: if she were not thus affected, by its abundant impregnation with albumen; if she were, by its full provision of urates. M. Rayer fancies that in this, and in some other similar cases, the proportion of lithates was influenced by the scrofulous habit of the patient.

From an examination of the cases published by Blackhall, Scudamore, and Bright, exemplifying the occurrence of albuminuria in gout, M. Rayer concludes that in some cases this phenomenon depends on the coexistence of Bright's disease, that in others its cause is unknown, but may possibly be "concomitant disease of the heart, or a modification of diabetes."

The duration of the chronic form of Bright's disease is exceedingly variable, and indeed defies exact calculation. In the first place, we can rarely feel satisfied of the accuracy of patients in their assurance that these symptoms commenced at this or that period,—not to speak of the uncertainty of such commencement as a sign of the real outbreak of the affection. Nor, even after the sufferer has placed himself under medical care, can the ulterior duration of the disease be predicted with even tolerable certainty; if the presence of albumen in the urine have been ascertained, this throws no light on the period when dropsy may supervene; nor does the establishment of anasarca make the problem of ulterior duration of easier solution.

Authors appear to have established, much to their own satisfaction, the etiology of the disease. The exposure of the body to sudden changes of temperature, and especially to the simultaneous action of cold and damp, is set forth as the most common cause of the disorder, and as being particularly evident after scarlatina. If, however, this be the fact in acute cases—and we are not disposed to contest this—it may be doubted in respect of the chronic order. We have not only no hesitation in affirming with Dr. Christison that, "since in the generality of cases the disorder establishes itself silently and very gradually, its exciting cause must obviously prove for the most part inappreciable;" but we cannot help feeling persuaded that had he observed the caution, which he well states to be requisite, in taking for granted the reference often made by patients of their illnesses to cold, he would be disposed to admit, even more fully than he has done, our utter ignorance of the exciting causes of the disease. However, quasi-statistical facts are adduced by M. Rayer and others to support the current opinion;—he enumerates a head of trades, the followers of which, he alleges, are more prone to the disease than other persons. But in the first place, he seems to have collected under this host of trades, peculiarly exposing their followers to cold and damp, the most numerously peopled artisanships of Paris;—if they are stronger in numerical force, of course, in the natural course of things, they should furnish the largest quota of the disease in question.

Dr. Christison finds "the constitution of intemperance" a most important predisposing cause of the disease, and makes a nice distinction of the spirit-bibbers into those who are habitual drunkards, and those who constantly indulge to a large amount, yet never enjoy themselves so fully as to lose their perpendicular in consequence. But where is the proof that the persons belonging to either of these distinguished classes of society furnish the chief share of patients labouring under this renal disease? Has Dr. Christison, after carefully ascertaining the proportion of drunkards to sober persons supplying the inmates of the Edinburgh Infirmary, then compared the amount of renal disease furnished by each, and found the drunkards in a large majority? He dreams of nothing of the kind,—and hence his inference on the subject is, to say the least, utterly valueless in a scientific point of view; more especially as, unfortunately for the moral state of the lower orders of the town population of these islands, there are few among them who would not take rank in one or other of Dr. Christison's divisions. The curious in hypothesis will find much more to gratify their propensity in the volumes before us: but we believe we shall have the sager portion of the profession with us when we affirm that nothing of an accurate kind is known on the subject,—and that so it must remain until it be studied on very different principles from those followed by the ordinary constructors of etiological chapters.

The diagnosis of the disease next claims our attention. On a former occasion we entered very fully into the existing state of knowledge respecting the causes of albuminuria, and showed from the experience of the most eminent observers the extreme error of the notion—unfortunately even still too prevalent—that the mere presence of albumen in the renal secretion announces special disease of the kidneys. We shall now proceed to the examination of another point, namely, whether the amount or persistence of this impregnation is characteristic of this particular disorder, and what other qualities of that fluid may be thus characteristic. But first we must advert to a portion of Dr. Bright's most recent publication intimately connected with this subject. The chief motive of Dr. Bright in favouring the profession with this new communication was "to furnish himself with an opportunity of explaining his views on one important point connected with *the* disease attending albuminous urine, in reference to which he has been singularly misunderstood." The presumed misconception under which Dr. Bright apprehends he has suffered is, that he maintains the occurrence of albuminous urine to be always and necessarily connected with "*that organic disease* which in its various shapes and modifications has been so fully described." The learned writer then proceeds to quote from his previous writings passages showing that he conceived the functional, preceding the organic changes, to be productive in some cases of the morbid condition of the urine in question. For our parts, we never entertained the opinion respecting Dr. Bright's notions which he is here so anxious to disclaim; but we did believe him to suppose that some condition, whether functional or organic, connected with the disease he has described, is the sole cause of albuminous impregnation,—and that he does even still maintain this, appears clearly from the passages just cited. We would point out, too, the curious fact, that in the expression "the disease attending albuminous urine," Dr. Bright appears to make the latter the cause of the former.

In the majority of cases, abundant and persistent impregnation of the urine with albumen is indicative of the presence of Bright's disease; but Dr. Morrison's case, formerly referred to, even if no other of the kind had been met with, would suffice to prove that such abundance is not a pathognomic sign. There are few cases, however, in which, if to such impregnation be joined deficiency of saline constituents and low specific gravity, the observer may not with confidence diagnosticate Bright's disease. Dr. Christison, though in the following brief summary showing how useful the characters of the urine may become in this respect, wisely cautions the practitioner against trusting to these alone, when he has it in his power to obtain additional information from other local and general signs, the secondary affections, &c. It will be perceived that in these propositions Dr. Christison again exhibits the peculiarity of his opinions respecting some points already referred to.

"1. When the disease has continued for a short time with acute symptoms, the characters of the urine—namely, a somewhat reduced density, a diminished amount of daily discharge of solids, and high coagulability—are invariable, and do not occur conjunctly, so far as is yet known, in any other disorder. 2. There is a very common conjunction of characters in the advanced stage, which has seemed to me never to occur in any other malady, namely, great reduction of density, some diminution of quantity, much diminution of the daily discharge of solids, and slight coagulability. 3. Another conjunction, not less characteristic, perhaps, is great reduction of density, slight coagulability, and a great increase in quantity, consequently with little or no diminution of the daily discharge of solids. 4. I have never in any circumstance, except in the advanced stage of granular disorganisation of the kidneys, met with urine about the natural standard in quantity, of the very low density of 1006 or 1008, consequently defective materially in the daily discharge of solids, almost colourless, or cherry-red, or smoke-brown, or orange-yellow, and obscured by opalescent muddiness, which does not disappear under rest or gentle heat—even though not coagulable. 5. Though not absolutely prepared to state the same proposition where the quantity of urine is superabundant, and its other qualities such as those last described, I am inclined to think this condition also characteristic." (p. 56.)

The supervention of anasarca gives great additional certainty to the diagnosis: Dr. Christison supposes that the characters of this anasarca will in themselves sometimes suffice for its establishment. He has not for nine years (the number of cases observed would have been a better criterion of the value of the statement,) met with a single case of inflammatory dropsy where there were not unequivocal signs of the kidneys being diseased: he admits, however, that there may, as before intimated, be some doubt whether this is the fact in cases of dropsy consequent on scarlatina. A character frequently observed in the œdema depending on the renal disease is, that the part does not pit on pressure: Dr. Christison considers this peculiar to it. Again, "all dropsies where the urine is steadily above the healthy standard in point of quantity occur," according to this author, "in connection with granular kidney, except in the instance of dropsy attending the advanced stage of saccharine diabetes." He is also inclined to think, though on this point not prepared to speak with confidence, "that all dropsies where the urine not being above the healthy standard in quantity, is also below 1010 in density, are connected with granular disorganisation of the kidneys, whether the urine be albuminous or not."

In the acute stage of Bright's disease, when the urine is bloody and albuminous, and dropsy has not yet appeared, the case might be mistaken for essential hæmaturia, or that occurring in hemorrhagic purpura, or vice versâ; but in the latter, blood is voided in large quantities and in clots; one of the renal regions is commonly more painful than the other, and the qualities of the urine usually change in the course of twenty-four hours. Of the presumed distinction respecting transmutation into albuminuria, we have already stated the inaccuracy. We can add little to our previous statement of the difficulties attending the distinction of the incipient stage of Bright's disease; if dropsy be present, the case is clearly of the latter description; if this be absent, the diagnosis seems, except under particular circumstances, to be in the present state of knowledge impossible. The passive renal hyperæmia attending diseases of the heart is oftentimes with difficulty distinguished from the renal disorganisation; for although the albuminous urine of the former is generally of healthy specific gravity, and contains the normal amount of solids, yet it is occasionally much less dense than in health. Under the latter circumstances M. Rayer confesses that it is impossible to determine whether the dropsy and albuminuria depend on the cardiac malady alone, or on superadded renal disease. The œdema depending on the morbid states of the heart usually commences with the ankles, and even when advanced is diminished by the horizontal posture: that occurring during the disease of the kidneys frequently exhibits itself first about the face, and is little benefitted by the recumbent posture. On the distinctive marks of encephaloid and tubercle of the kidney M. Rayer has not yet spoken.

A few words may here be appropriately introduced relative to the presumed frequency of the disease. Those who have written most enthusiastically on the subject seem to us to have exaggerated this most remarkably, or at least, beyond all question, to have drawn their inferences from incorrect data. Take for example Dr. Bright, who, in order to ascertain its frequency, "instituted a series of experiments, by taking the patients promiscuously as they lay in the wards, and trying the effects of heat upon the urine of each, and at the same time employing occasionally other reagents." We need only refer the reader to the table given in our former article of the causes of albuminuria, and to what has been said in the foregoing pages, to convince him of the insufficiency of this sign as evidence of the presence of the disease, more especially when, as appears to have been the case with Dr. Bright's experiments, the specific gravity of the urine was not examined. Need we wonder that he found the proportion of persons labouring under the disease he has described "at least one in six, if not in four?" And here is the calculation referred to with commendation by Dr. Christison (Pref., p. 9,)—by Dr. Christison who elsewhere rejects, as an unfair interpretation of his opinions, the notion that albuminuria is pathognomic of the disease.

In a chapter entitled Pathogenesis, wherein M. Solon endeavours to trace the mode of formation of the morbid changes of the kidney, this observer states his belief that Bright's granulations are a product of interstitial exhalation, and not a degeneration. Valentin's conclusion on this point, drawn from the microscopical examination of the kidneys of a child in which the cortical substance was of yellow colour, and the external surface presented spots of ash-gray tint, is of a very different kind. This micrologist found the uriniferous ducts and the substance separating them perfectly normal, and ascertained that the vessels presented no unusual appearance either in respect of their diameter or distribution,—in fact, that the renal tissue possessed its healthy characters. The yellow discoloration appeared produced by a quantity of matter of that colour filling the ducts of the cortical substance, and composed of small granulated patches, of irregular and variable shape, and of yellow roundish globules. The tubuli of the tubular substance contained matter of the same kind, but in much less quantity. From these observations Valentin infers that the disease does not affect the tissue of the kidney, that this is in truth unchanged, and merely the receptacle of urine of modified properties: and hence that the albuminous state of the urine is in reality the cause of the deceptive appearance of disease in the renal tissue, instead of being the effect of renal disorganisation; he further infers that a morbid change of the blood leads to that of the urine. Whatever confidence the name of Valentin may warrant in the accuracy of this description, the reader will not forget that it is derived from a single observation of one form only of the disease, and therefore decidedly requires confirmation. Nor does this confirmation appear likely to be soon obtained—at least the inquiries of Gluge seem to have led to the very different result, that the disease essentially consists in a deranged state of the capillary circulation of the cortical substance, and especially of Malpighi's glands.

Is Bright's disease an inflammatory affection? In commenting formerly upon the term albuminous nephritis, employed by M. Rayer to designate the malady, we admitted the extreme probability that such was the fact, and the details of this author's present volume very distinctly show, as it appears to us, that such is the truth. "There is no disease," observes M. Rayer, "in the course of which the phlogistic diathesis is more distinctly marked, none wherein it manifests itself in a greater variety of situations or under a greater number of forms. . . . In the first stage of the disease, the kidney is red, swollen, and sometimes painful; and, if we are unable to ascertain whether it be hot, we are at least certain that the changes it has undergone are productive of fever." If the inutility of the antiphlogistic treatment during the advanced stages of the disease, and its want of influence over its chronic anatomical forms generally, be urged in objection to this doctrine, we reply with M. Rayer, that such is the character of the consecutive lesions of all inflammatory affections. Will bleeding remove the intestinal ulcerations and indurations of chronic dysentery—the false membranes and puriform effusion of chronic pleurisy? And, because venesection is unavailing for this purpose, shall we expunge dysentery and pleuritis from the list of inflammations? Precisely the same line of argument may be adopted in answer to those who urge that the disease occasionally commences without active signs of inflammatory action. The qualificative "albuminous" cannot, in strictness, be reserved, as already stated, for this special form of inflammation, because simple nephritis is also attended with albuminuria.

With respect to the manner in which albuminous impregnation is produced, we need scarcely say that Valentin's notion is not that generally admitted, and that the majority of writers believe the renal disease to be the cause of that impregnation. But how are the two phenomena connected? If, as M. Solon observes, we suppose that the morbid condition of the tissues causes the serum of the blood to pass by simple transudation into the urinary passages, it may be objected that were this the case, the renal excretion should carry with it the other constituents of the blood also, which is by no means the fact. It contains no fibrine, and may hold colouring matter in suspension only temporarily, or in many cases not at all. Besides, if the serum of the blood escaped in the manner supposed, the liquid portion of the fluid remaining in the circulating system should be proportionally less abundant than natural: now the very contrary is the truth,—its relative quantity is greatly beyond the normal standard. M. Solon considers it more probable that the morbid state of the urine results from imperfect elaboration of the materials upon which the kidney acts in the normal state; in confirmation of this view he cites the presumed fact, that the more complete the disorganisation of the kidneys, the greater the quantity of albumen discharged with the urine; but, as already mentioned, the accuracy of this fact is altogether denied by Dr. Christison. The subject is plainly still open to inquiry.

Again, assuming as a position, which will be readily granted, that the anasarca is in direct dependence on the morbid state of the kidney, it may be enquired what is the mode of connection between them. Sabatier and Martin-Solon seem inclined to believe that it depends on the increased proportion of serum in the blood, and on its greater tenuity, the experiments of Magendie having proved that the facility of exhibition increases with the tenuity of fluids. Dr. Christison fancies that his experiments on the constitution of the blood lend force to this theory. It is, however, completely overturned by two facts thus stated by M. Rayer: "We know for a certainty, on the one hand, that patients affected with albuminous nephritis after scarlatina rapidly become dropsical, before any considerable quantity of albumen has been discharged with the urine; and, on the other, that individuals labouring under the endemic hæmaturia of tropical climates void albumen for years, sometimes during their entire lifetime, without becoming dropsical." (p. 608.)

Dr. Christison devotes twelve pages to the consideration of the prognosis of Bright's disease, examining successively the chance of recovery from the fundamental malady, the probability of relief from the secondary affections, and the particular symptoms which indicate approaching amendment or the contrary. With respect to the first of these points, cases of acute and chronic character must be considered separately. The former appear to be as certainly curable, as the latter, so far as present knowledge permits us to affirm, is beyond the reach of art. The chronic forms of the disease are, sooner or later, in truth, almost invariably fatal,—but the fatal event may be averted to—we are almost justified in saying—an indefinite period, provided anasarca have been completely removed, and the patient carefully avoid all excess of every description and rigorously live according to hygienic rule. With these precautions, a life of very tolerable comfort, with freedom from every direct effect of the disease except albuminuria, may be generally ensured. Respecting the secondary disorders, it is sufficient to say in general terms that they are distinguished for obstinacy, with the exception perhaps of dropsy, which is generally observed to diminish considerably or disappear in patients of the lower orders, who exchange the slavery, privation, and disorder of their ordinary life for the ease, comparative luxury, and regularity of an hospital: to this change, at least, may be attributed much of the good effect produced, much more than the criers-up of the various and often opposing modes of treatment under which it has been observed to occur are likely to be willing to admit. As to the special symptoms announcing amendment, or the contrary, we must be prepared, from what has already been said on the differences of opinion regarding the relation of the modifications of the urine to the stages of the disease, for want of unanimity between the authors. Dr. Christison, of course, considers "the risk to life by no means proportioned to the amount of albumen in the urine, and that the reverse holds true in some measure." Rayer, Martin-Solon, and all those who maintain that the quantity of albumen increases with the advance of disorganisation, must of course hold an opposite persuasion. And it is remarkable, that M. Rayer seems to think that the fact of the urine containing a small proportion of albumen would place the patient "in perfect security," were it not that, under such circumstances, death has been known to occur suddenly from intercurrent affections of the lungs or brain. Dr. Christison, however, qualifies the above statement very considerably in the following observations: "If attended with a moderately high or gradually increasing density of the urine, whether with or without an increase in its quantity, the diminution and disappearance of albumen are favourable signs. But this will, on the contrary, rather indicate a gradual advancement of the disease, if the density of the urine should at the same time slowly decrease, especially where its quantity remains stationary. Diminution of the albumen, with increased quantity and diminished density, cannot be relied on as a prognostic on either side." On the whole, the patient's danger would appear to be in proportion to the lowness of the density of the urine, unless the quantity of daily discharge is considerably above the standard.

Respecting the treatment of the disease in the acute stage, authors are highly unanimous. Antiphlogistic remedies of active character are recommended by all,—and, of course, the most important of these, blood-letting. "When there is no contra-indicating circumstance from age or constitutional infirmity, whether original or acquired, the extent to which bleeding is carried should," according to Dr. Christison, "be regulated, as to extent and repetition, by the same rules which govern its employment in ordinary inflammations." This writer gives a hint of no mean utility, in enjoining careful examination of the blood drawn, more especially in respect of its colouring matter; by the proportion of the latter, he conceives, the degree of advancement of the structural changes in the kidneys may generally be ascertained; and if it should appear from the low proportion of colouring matter that the disease is not in its early, but in some one of its more advanced stages, and hence the acute symptoms are not strictly primary, depletory measures should be pursued with much greater caution than under the contrary circumstances. The invariable accuracy of this mode of ascertaining the amount of progress of the disease may be doubted. Local abstraction of blood by cupping or leeching the renal regions, and the application of large linseed-meal poultices, are recommended by Drs. Bright, Barlow, and Rayer. The warm bath—if used beside the patient's bed—is advised by the same practitioners.

The restoration and maintenance of the cutaneous perspiration is one of the most important points to be attended to in the treatment of this affection, according to the testimony of the majority of those who have written upon it. Hence the value of keeping the patient in an equable and tolerably elevated temperature: so important is this, that we find Dr. Bright, who confines his patients closely to bed during the entire duration even of a protracted treatment, ascribing increase of anasarca to the passage of the cool air allowed to circulate through the wards over the bed-clothes of the patients. The use of flannel clothing is indispensable. Diaphoretics are advised in this stage by the majority of writers, and after the employment of more active remedies are probably useful; but the best diaphoretic treatment is here, as in inflammatory affections generally, the antiphlogistic. Dr. Osborne's views respecting the administration of medicines of the class just referred to, have been too long before the profession to require discussion at our hands.

The notions of Dr. Barlow on this point, though briefly alluded to in one of Dr. Bright's early papers, having for the first time been fully explained in the last number of the Hospital Reports, may be here more fully alluded to. This physician, he informs us, struck with the slowness of recovery of patients treated by the ordinary plan of bleeding, &c., was induced to seek for some more effectual method of removing the disorder. Persuaded of the inflammatory nature of the complaint, he determined upon a trial of tartarised antimony; and the results have, he assures us, as usually happens with the devisers of novelties in therapeutics, fully answered his expectations;—and several cases, which at least prove that recovery will take place under the use of this medicine, are related. Some of these are valuable in a pathological point of view, as further contributing to prove the identity of the renal disease occurring after scarlatina with the affection described by Dr. Bright, and as exhibiting the tractableness of the complaint when really occurring with the character of an acute disorder in adults. But the reader must not imagine that Dr. Barlow confines himself to the exhibition of tartarised antimony in diaphoretic doses,—this appears a mere adjunct in the treatment, and the precise share of the sum of benefit obtained which is to be attributed to it cannot very easily be established. Dr. Barlow "would not merely recommend tartar emetic in the acute form of this disease on account of its diaphoretic properties, but on account of its power of lowering the heart's action, as well as its local effects upon the capillaries when it reaches them through the circulation." If the pulse be hard and full, the medicine may be given in nauseating doses,—if not, smaller doses are sufficient. Whatever share of converts Dr. Barlow shall eventually make to the propriety of his modification of the diaphoretic mode of treatment, it is certain that the latter is far from being held in general estimation. Rayer, whose expectations of benefit from its employment have been "rarely realised," has found that the effects of even the most powerful agent for producing perspiration—the simple or medicated vapour bath—have rarely been maintained beyond a few hours after each bath. Dr. Christison observes: "I have often resorted to the diaphoretic plan, sometimes with evident advantage, *much more generally* without success; and I must likewise add, that I have several times seen general perspiration, both spontaneous and from the use of diaphoretics, fail to produce any material relief." Yet, singularly enough, we are told in the next sentence "that no one can question the general propriety of the diaphoretic *method of cure*."

The advisability of diuretic medication in this complaint is likewise matter of dispute. Dr. Osborne thinks that, so far from being useful, it may actually produce the disease; Dr. Bright has little confidence in it; Dr. Christison, on the other hand, "has very seldom witnessed decided diminution of the dropsy unless where diuretics [diuresis] or purging was either artificially induced at the same time or arose spontaneously." This practitioner has particular confidence in digitalis and cream of tartar.

We should have felt desirous of examining briefly the peculiarities of treatment required in respect of the diseases termed secondary in this affection, but we find we have exhausted our space.

M. Rayer's volume terminates with an historical sketch, occupying one hundred pages, of the rise and progress of knowledge respecting the remarkable disease which has been under consideration,—or, we should rather say, respecting its detached phenomena. In this most erudite dissertation, the laborious author traces the germ of our acquaintance with the subject in the very earliest writers: first, in regard of the connection of dropsy and disease of the kidneys; secondly, of dropsy and coagulability of the urine. Nothing can be rendered more clear from this survey of the contributions of our progenitors than the great merit of Dr. Bright, and that this principally consists in his having detected the connection between these *three* conditions.

BIBLIOGRAPHICAL NOTICE.

Edwards's Outlines of Anatomy and Physiology.[1]

The value which we have placed on this preliminary treatise to his work on Natural History by Dr. Edwards, is shown by the circumstance that we have urged upon more than one person to translate it into English; and an English version by one of our learned physicians was actually advertised in the Philadelphia prints. It is a valuable compendium for the tyro and for the general reader, and is elucidated by numerous woodcuts.

The translator appears to have executed his office well.

[1] Outlines of Anatomy and Physiology, translated from the French of H. Milne Edwards, Doctor of Medicine, Professor of Natural History at the Royal College of Henry IV. &c. By J. F. Lane, M. D. 8vo, pp. 312. Boston, 1841.

Jefferson Medical College.—Catalogue of Graduates, Session 1840–41.

Names.	Subjects of Theses.
Henry G. Adams, N. Y.	Phlegmasia Dolens.
John B. Ball, Va.	Intermittent Fever.
William B. Ball, Va.	Tetanus.
Joseph B. Barclay, Pa.	Uterine Hemorrhage.
Wellington Bird, Pa.	Scarlatina.
John C. Boyd, N. Y.	Indigestion.
J. R. Bowdoin, Va.	Typhus.
Joseph S. Beemer, N. J.	Amenorrhœa.
Zephaniah Butt, Pa.	Croup.
Moses B. Beers, Ct.	Science of Medicine.
John M. Clark, N. C.	The Art of Preserving Health.
John A. Chilton, Va.	Menstruation.
Robert W. Christy, Pa.	Tracheitis.
Peter F. Dillard, Va.	Cynanche Trachealis.
Irby Dunklin, S. C.	Acute Rheumatism.
James E. Ellis, Va.	Scarlatina.
George C. Finch, N. Y.	Menstruation.
Richard H. Gambill, Va.	Icterus or Jaundice.
John B. Grayson, Va.	Croup.
J. P. Green, Mass.	Burns.
J. Fletcher Gay Lord, N. C.	Endemic Diseases.
Wesley R. Gearhart, Pa.	Cynanche Trachealis.
Charles A. Harding, Md.	Uterine Hemorrhage.
Charles H. Hedges, N. J.	The Circulation of the Blood.
James W. Hudders, Pa.	The Modus Operandi of Medicines.
A. Alexander Howell, N. J.	Mental Derangement.
Chaplin J. Hays, Md.	Acute and Chronic Rheumatism.
Andrew Hepburn, Pa.	Diseases of the Heart.
William J. Harris, Va.	The Spontaneous Introduction of Air into the Veins.
Frederick W. Isbell, Va.	Poisoned Wounds.
W. Brook Jones, Wash., D. C.	Rheumatism.
William B. Knox, N. C.	Apoplexy.
John Y. Lind, Md.	Acute and Chronic Bronchitis.
James C. Lee, Pa.	Articulation of the Teeth.
J. Stuart Leech, Pa.	Obstetrics, its Particular Claims on the attention of the Student.
William E. Mulhallon, Pa.	Impotentia.
Richard S. Maupin, Va.	The Circulation of the Blood.
James M. A. Muschett, Va.	Typhus Fever.
Thomas M'Farland, Va.	The Pulse.
John M'Creery, Pa.	Position as a Therapeutic Agent.
Benjamin T. Neal, Jr., Pa.	Baths.
Joseph Oyster, Pa.	Pneumonitis.
William J. Smith, Ga.	Erysipelas.
Samuel A. Sterret, Pa.	The Importance of Medical Science.
John Tomlinson, Pa.	Mammary Abscess.
Pierre G. Tourangeau, Quebec.	L'Icterus.
William W. Watson, Pa.	Puerperal Fever.
Hamilton F. Whitney, Pa.	The Gastric Organ.
Myron W. Wilson, N. Y.	The Capillary System.
John G. Wilson, Md.	Acute Pleuritis.
Harrison G. O. Winslow, Mass.	Phthisis Pulmonalis.
Charles O. Waters, N. Y.	Correct Diagnosis.
A. L. Williams, Ct.	Bronchitis.
Henry H. Wheeler, Pa.	The Progress of Cerebral Physiology.
Josiah P. Woods, Va.	Acute Bronchitis.
Allen N. Woolverton, U. C.	Indigestion.

The honorary degree of Doctor of Medicine was conferred on Dr. SAMUEL ANDERSON, of Delaware county, Pa.

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ART. I.—ON THE THERAPEUTICAL PROPERTIES OF THE PHYTOLACCA DECANDRA.

BY ALFRED T. KING, M. D.

The study of natural history, particularly botany, having been for some years the occupation of my leisure moments, my attention has therefore been naturally directed towards the investigation of the medicinal properties of some of our indigenous plants. The following observations are the result of some experiments made since the year 1837, in order to determine the therapeutical properties of the phytolacca decandra. This is an indigenous, dicotyledonous plant, found growing in vast quantities in every part of the United States, from Canada to Georgia, and from the Atlantic to the Pacific ocean. It flourishes along road sides, in newly cleared fields, and near the borders of woods. Although the phytolacca is peculiar to our own land, yet it is said to grow luxuriantly in the north of Europe, and in the south of Africa, where, however, it is supposed to have been introduced from this country.

Agreeably to the Linnæan arrangement, this plant belongs to the class decandria, order decagynia. It has a large perennial root, from five to six inches in diameter, very branched, covered with a brownish cuticle, but whitish, fleshy, and fibrous within. The root ought to be gathered, for medicinal purposes, late in the autumn, or early in the spring ere its vernal shoots begin to expand. Its annual stems often attain an immense height, even twelve or fourteen feet, when growing in a rich and genial soil. The stems are very branched, and the branches assume a reddish hue towards the middle of July. It is at this period that the leaves contain the greatest amount of medicinal activity, and should then be gathered, and carefully dried in the shade. The leaves are oblong, ovate, acute at each end, alternate, and petiolate. Flowers are in simple racemes, small, with ten stamens and ten styles. The corolla consists of five ovate, concave, and inflexed petals, white. This plant belongs to the natural order phytolacca, the medicinal properties of which, according to Lindley, are *emetic*, *cathartic*, and *anti-rheumatic*. Every part of the plant appears to be active, the root, the leaves, and the berries. The root, however, it is generally supposed, possesses the greatest amount of medicinal activity, but I have usually preferred the leaves, if I can obtain them fresh—for they lose much of their virtues by drying—at the period when their stalks are assuming a reddish hue. Speaking of this plant, Professor Lindley makes the following remarks:—"A tincture of the ripe berries of phytolacca decandra seems to have acquired a well-founded reputation as a remedy for chronic and syphilitic rheumatism; and for allaying syphiloid pains. By some it is said to be more valuable than guaiacum. Its pulverised root is an emetic. And a spirit distilled from the berries is stated to have killed a dog in a few minutes by its violent emetic effects." According to Decandolle, this plant is also a violent purgative. The young shoots in this country are frequently eaten as asparagus. In the form of an unguent, prepared from an extract of the root, I have found it more efficacious in obstinate cutaneous affections than any other remedy except the *sanguinaria canadensis.* But in hemorrhoids its effects have been, according to my experience, the most remarkable and striking. Indeed, over this disease it appears to have a peculiar and specific action.

The term hemorrhoids comprehends various tumours which grow from the verge of the anus, and whose constitution and characters differ so widely that surgeons usually divide them into three distinct varieties or species, viz. *internal*, *external*, and *venous hemorrhoids.* The two former varieties admit of radical cure by excision, but in the treatment of the latter our best surgeons rely upon palliatives only; neither puncture, which has been advised, nor excision, either by the ligature or the knife, is at present deemed expedient. Professor Syme, in reference to the treatment of venous hemorrhoids, says: "The tendency of the venous tissue to resist irritation forbids any operation, and excision, as well as puncture, which have been recommended, should both be carefully avoided, lest they excite inflammation of the enlarged vessels, and give it the unmanageable character which distinguishes it when of traumatic origin." As this variety depends upon a varicose enlargement of the hemorrhoidal veins, they are liable to the same kind of sub-acute inflammation to which the varicose *vena saphena* is subject; and this inflammation may go on to suppuration, and thus lay the foundation for *fistula in ano.* To be able to obviate so deplorable a state of things has long been considered a desideratum, and I think that he who will examine unprejudicedly and impartially the virtues of the phytolacca decandra, will be satisfied that we possess in it all that we could desire. But, in order to demonstrate its effects in this painful disease, I will give a brief extract of a few cases from my note-book:—

Case 1.—Saw B. H. in the summer of 1837, while labouring under a severe attack of hemorrhoids. He told me that he had suffered, with occasional intervals of immunity, for near five years. The tumours often bled, which always gave him temporary relief. Had used all the ordinary remedies in vain. The bowels having been opened by an aperient, I determined to try the effects of phytolacca decandra; accordingly, I procured a handful of the green leaves, had a strong infusion made by pouring a pint of boiling water upon them and allowing the whole to stand one hour near a warm fire, and directed him to take one tablespoonful every two hours, to keep himself quiet, and as much as possible in a recumbent posture. He followed my directions strictly, and was rewarded, in less than a week, with a perfect and permanent cure.

Case 2.—Mrs. N., aged about 37, had suffered much agonising pain for six or seven years. The tumours never appeared externally, except by an expulsive effort, when they were protruded and always bled. Took the infusion as above directed, and was perfectly cured. A short time afterwards she moved into Ohio, and I have not heard from her since. Presume, however, I would have heard from her if she had had a return of the disease.

Case 3.—Sheriff of this county had been afflicted for twenty years with hemorrhoids. Was relieved by the phytolacca, but died a short time afterwards of phthisis pulmonalis.

Case 4—Was a remarkable one, and I shall therefore describe it more at length. M. W., aged about 45, of lymphatic temperament, a countenance peculiarly anxious, exanguious and cadaverous. Had suffered almost constantly with hemorrhoids for *fifteen years.* The tumours often bled, indeed they acted almost as a constant drain to his system, and caused his countenance to assume an aspect not unlike that of a walking ghost. Had suddenly an aggravated attack, which caused me to be sent for in haste. On my arrival I found him in great agony, and on examination I found the rectum almost filled with several large hemorrhoidal tumours; they had protruded beyond the sphincter, which had so contracted upon them that the introduction of the index finger was found entirely impracticable. They were of an irregularly round form, and of a florid colour. His agony was such that he declared to me that he must die if he did not soon obtain relief. The condition of this poor man to a philanthropic mind was truly pitiful, for he could place himself in no position in which he could find ease. His pulse was active, and he had considerable thirst. I immediately bled him to ℥xvj, and exhibited a gentle aperient, followed by an anodyne, which gave him much temporary relief. Next morning I again visited him. He had reposed very tranquilly during the night, but the pain soon returned in the morning. I brought with me a handful of the fresh leaves of phytolacca decandra, had a strong infusion made of them, and directed ℥iv to be thrown up the rectum by means of a syringe, and one tablespoonful to be taken every two or three hours. In consequence of the size of the tumours, and the great irritability of the part, the injection was found to be quite impracticable. The internal use of it, however, was persevered in, and occasionally a wet leaf was applied to the external parts of the tumours. In a few hours he found sensible relief, and the tumours began to diminish. I called in the evening, and discovered that the medicine had disagreed with his stomach. A second attempt was now made to use the injection, which succeeded without much difficulty. The intervals between the doses were prolonged, which obviated its nauseating effect. In forty-eight hours after he commenced the use of the infusion he had perfect relief from pain, and his bowels were freely acted upon; and on the third day there was not a vestige of the disease, nor has there been a symptom of it since, now three years.

Many other cases of a similar though less remarkable character might be adduced; but I presume enough has been said to demonstrate, to the most incredulous mind, the great potency and unparalleled efficacy of phytolacca decandra, not only in hemorrhoidal affections, in which I have most used it, but also in many other diseases to which frail humanity is incident.

Alfred T. King.

Art. II.—CASE OF SUDDEN DEATH DURING PARTURITION. NECROSCOPY TWELVE HOURS AFTERWARDS.

BY ALFRED T. KING, M. D.

Mrs. L., coloured woman, aged about 40 years, received some injury, the cause of which she would not disclose, while about four months pregnant with her fourteenth child. Complained of a dull pain in her left side, extending across to the right. Venesection and other appropriate remedies were made use of by Dr. Postlethwaite, by which she was entirely relieved. A short time previous to her accouchement the same gentleman was again requested to visit her. She had at this time some uneasiness which simulated labour pains, but upon examination *per vaginam*, the *os tincæ* was found undilated. This examination discovered a pendulous tumour of considerable magnitude, which almost filled the vagina, and protruded some distance beyond the *os externum.* It was soft and yielding, admitting of the easy introduction of the hand under it, up to the *os tincæ.* This tumour had been noticed during the accouchement of her last five or six children, but in the intervals no attention was paid to it. It had never interfered with the extrusion of the fœtus, all of her children having been born by natural throes without manual assistance. There being at this time no natural labour, a small quantity of blood was abstracted, and an anodyne pill exhibited, which produced quiescence for the time, and she went about near two weeks longer, until July 20. In the morning of this day she had some pains, but the *os uteri* was undilated. In the evening pains still continued so weak and irregular, that Dr. P. deemed it expedient to exhibit an anodyne and leave her until the next day. This had a happy and tranquillising effect, and in the morning, July 21, labour came on in good earnest. This morning I was requested by Dr. Postlethwaite to visit her. On examination *per vaginam* I found the tumour as above described, and about the size of a pint cup. The *os tincæ* was dilated to near the size of a dollar, and the labour was fast approaching. I was satisfied that the tumour could not interfere with the expulsion of the fœtus. Being obliged to ride immediately into the country, I did not, therefore, see the patient afterwards. Labour, however, rapidly progressed, the membranes broke, and the head of the child advanced, with the vertex presenting. Every thing was calculated to inspire confidence, both on the part of the accoucheur and the patient, in a speedy and safe delivery. At length a pretty strong pain seized her, after which she rose to her feet, walked several times across the floor, apparently in good health and spirits, and even refusing to be assisted, she kneeled upon the floor. Presently another strong uterine effort seized her, which caused her to cry out, "O, doctor, do assist me," and was immediately observed to sink, supposed to be in a swoon. As soon as possible she was raised from her knees and placed upon the bed, when a few convulsive respirations closed the scene. She died without a struggle. In this case what was the cause of death? It was sudden and unexpected, the patient appearing strong and in good spirits *one minute* before her dissolution. I suspected a rupture of the uterus.

Necroscopia.—Twelve hours *post mortem* Dr. Postlethwaite and myself proceeded to an examination in the presence of the husband of the patient. An incision was made in the usual manner through the *linea alba*, which immediately exposed the gravid uterus *in situ*, with the fœtus *in utero.* There was no rupture of this organ, but it presented a very dark and contused aspect. An incision was made into it, and the fœtus extracted; it was a large and healthy female child. During the whole of this examination, the only curiosity that the husband manifested was to know the sex of the child, and when this was announced, he was perfectly satisfied. He appeared to me like a case-hardened wretch, without feeling, without humanity. The placenta was easily detached. We now examined the tumour, which we found, as before suspected, to be a polypus. It was attached to the cervix, within the *os uteri*, by a membranous pedicle; the lower part of it seemed firm, and, when cut into, presented a cartilaginous aspect. The bulk of the polypus was, as above mentioned, during labour, about the size of a pint cup, and weighed after death near *one pound and a half.* It is now in my collection, preserved in spirit. The kidneys, with their ureters, the bladder, spleen, pancreas, ovaria, &c., were found in a normal state. Our attention, however, was arrested by the injected and yellow appearance of the great omentum and peritoneum covering the intestines on the right side. About four or five quarts of black venous blood were found in the cavity of the abdomen, and upon carefully raising the liver, we observed a complete detachment of its peritoneal coat, over about two thirds of its upper surface, with a deep rent into its substance of from five to seven inches in extent, involving several of the principal branches of the *vena porta*, and probably the hepatic artery,—the latter we were unable to determine, in consequence of being hurried, and obliged to desist from further examination by the undertakers. *Two thirds*, at least, of this viscus, were literally *gangrenous or rotten*, and so completely dissolved in continuity as to be easily torn, and even wiped away with the fingers, thus closely resembling *ramollissement du cerveau.* Could this state of the viscus be produced without being preceded by inflammation? And if inflammation did exist, should we not expect to find some of its more usual effects, such as effusion of lymph, or thickening, or adhesions, none of which were observable? The primary cause of the state of the liver which I have just described is to me unknown, but one might imagine it to be produced by a blow inflicted by the arm of a strong man; and to say the least of it, this may be considered a well-founded suspicion.

ALFRED T. KING.

BIBLIOGRAPHICAL NOTICES.

Annual Reports of Hospitals.

We have received from our friend, Professor J. B. Beck, of the College of Physicians and Surgeons of New York, the "State of the New York Hospital and Bloomingdale Asylum, for the year 1840," and the "Annual Report of the Board of Trustees of the New York Dispensary;" from which it appears that these extensive and valuable charities are shedding their blessings on numerous unfortunate sufferers. The New York Hospital does not, however, seem to be capable of admitting as many patients as our own excellent establishment at Blockley, nineteen hundred and seventy having received the benefits of the former in the course of the year, which is below the number admitted last year into the Philadelphia Hospital. In the Bloomingdale Asylum for the Insane, two hundred and thirty-nine persons were under treatment during the year 1840, of which number there were cured, 60; discharged much improved, 25; discharged at the request of friends, 8; eloped from the premises, 1; died, 14; remaining in the asylum, Dec. 31, 1840, 131.

By Dr. Awl, the superintendent, we have been favoured with the Second Annual Report of the Directors and Superintendant of the Ohio Lunatic Asylum, presented to the general assembly, Dec. 20, 1840.

This institution is proceeding onwards in a career of signal usefulness. The whole number of patients admitted was two hundred and fifty-eight,—170 being old cases, and 88 of less duration than one year,—201 of these were paupers, and 57 pay patients; the per centage of recoveries on all the cases discharged being 66.66; on all the old cases discharged, 41.17; and on all the recent cases discharged, 85.50.

The report contains some interesting tables and observations by Dr. Awl.

Dr. Luther V. Bell, the able physician and superintendent of the M'Lean Asylum for the Insane, near Boston, has obliged us with the Annual Report of the Board of Trustees of the Massachusetts General Hospital, for the year 1840.

362 patients were received during the year 1840, of whom 144 were cured, 96 much relieved, 41 relieved, 43 not relieved, and 22 died.

The committee remark, that the condition of the M'Lean Asylum for the

Insane has fully maintained its former excellent reputation; "The beneficial results of the mode of treatment, under the direction of Dr. Bell, are continually adding proof to the correctness of that mode, based as it is on kindness and sympathy to that most pitiable object in this world, the lunatic."

The entire number of insane patients under the care of the asylum during the year 1840 was 263.

Dr. Bell makes the gratifying remark, "That the records of the asylum justify the declaration that *all cases certainly recent*, that is, whose origin does not, either directly or obscurely, run back more than a year, recover under a fair trial. This is the general law, the occasional instances to the contrary are the exceptions."

On the interesting and important subject of the abolition of all personal restraint in the treatment of the insane, Dr. Bell thus expresses himself, from personal observation at home and abroad:

"An absence in the early part of the year of about four months in search of health, under permission of your board—a permission granted in a manner and accompanied with circumstances calling for his grateful acknowledgments—gave your superintendent some opportunity to observe and compare, and if occasion had offered, to improve, by the long established and extensive insane institutions of the old world. While surprised\and gratified at the extent and magnificence of many of these establishments, there seemed little or nothing in architectural arrangements, or in modes of moral or medical treatment of value, which has not long since been transplanted to or discovered in the American institutions. The only noticeable peculiarity worth communicating would seem to be, the experiment commenced recently in some of the British hospitals, of an entire disuse, as they consider it, of corporeal restraints. At the Lincoln Lunatic Asylum, it is said in the report of the Middlesex Asylum at Hanwell for 1839, that the last personal restraint occurred in January, 1837, and at the last mentioned institution, restraining apparatus has been thrown aside since the latter part of September, 1839. I consider one of the greatest pleasures of my visit to Europe to have been the privilege of spending the greater portion of a day at Hanwell, and the opportunity of conversing freely on this as well as other subjects relating to the insane with Dr. Conolly, the head of this extensive establishment, whose reputation as a medical philosopher and writer on mental alienation is no less recognised on this side of the Atlantic than at home, and whose urbanity and attention to a stranger, with no claims beyond a community of interests and pursuit, I cannot but gratefully recall. As any thing like improvement in the present system introduced elsewhere must soon attract attention here, and as the idea of absolutely discarding personal restraint has something so attractive in its very mention, I have been induced to bestow considerable reflection upon the expediency of adopting such a universal rule at this asylum. Thus far, at these two great institutions referred to, the former with about one hundred and fifty, and the latter with over eight hundred patients, the experiment has been found so successful as to be persevered in; whether adopted beyond these hospitals or not I have no means of ascertaining. It is certain, however, that the attempt has been much noticed and applauded in England, and of course will soon have its praises transferred to every portion of our land.

"As regards Great Britain, the encomiums bestowed upon this innovation may be all deserved;—in a country where at this moment *a chain* to each bed of at least one long dormitory may be seen at the extensive metropolitan hospital of St. Luke, such a discovery as puts an end to such barbarity may well excite applause; or at the Lincoln Asylum, where the number of patients under restraint were 39 of an entire number of 72, in 1830; 54 of 92, in 1831; 40 of 70, in 1832; 55 of 81, in 1833; 44 of 87, 1834; and so on, the change must be most gratifying to every humane heart.

"Dr. Conolly, in 'the Fifty-first Report of the Visiting Justices of the County Lunatic Asylum at Hanwell,' for the year 1830, (page 47,) remarks as follows: 'For patients who take off or destroy their clothes, strong dresses are provided, *secured round the waist by a leathern belt, fastened by a small lock.* For some who destroy the collar and cuffs of their dresses with their teeth, a leathern binding to those parts of the dress is found convenient. *Varied contrivances* are adopted with variable results *for keeping clothing on* those who would otherwise expose themselves to cold at night; and warm boots, *fastened round the ankles by a small lock* instead of a button or buckle, are sometimes the means of protecting the feet of those *who will not lie down.* * * * * *Those who are in the habit of striking suddenly, tearing the bed-clothes, &c.*, sometimes wear a dress of which the sleeves terminate in a *stuffed glove, without a division for the thumb and fingers.* But no form of strait-waistcoat, no hand-straps, no leg-locks, nor any contrivance confining the trunk or limbs or any of the muscles is now in use. The coercion-chairs, about forty in number, have been altogether removed from the wards; no chair of this kind has been used for the purpose of restraint since the middle of August.'

"Any gentleman familiar with the management of this, or, I believe, any other of the New England institutions from their origin, will at once declare, if this is all that is meant by an absolute disuse of restraining means—if the application of leathern mittens, waist-straps, varied contrivances for keeping on clothing, boots with locks, &c., are considered such mild and trifling measures as not to be included under the phrase of *personal restraint*, that this innovation or experiment or improvement can never be introduced here, for the best of all reasons, that the application of the severe measures reported as discarded at Hanwell never was heard of in our asylums, and but a few even of the measures deemed so insignificant as to form no exception have ever been found necessary here. If this is all that is intended in the new system, our experience for years may encourage them to go on fearlessly.

"An amount of restraint less than is intimated in these exceptions, has long proved adequate in this institution; the necessity, for example, of restraining apparatus for keeping the patient covered at night, is here obviated by the admission of heated air to the sleeping apartment when necessary. For some years the average number of patients under the restraint of leathern mittens has not exceeded one per cent, and often week after week elapses without even a single instance.

"I have no doubt that this rare use might with safety be carried to a still greater extent—to that of absolute interdiction; but how far it may be dispensed with, or how far the best good of the sufferer demands its application, is a question of judgment to be decided in view of all the circumstances of each case. An important rule is, that no restraint, even of the slightest kind, should ever be applied or removed except under the direction of an officer. This rule has always been incorporated in our code of domestic regulations. But to lay down the broad absolute rule of disusing all the mild forms of restraint, would not comport with the best good of an institution. I do not doubt that, with the number of active and trusty assistants we now have, it might be practicable to pursue such a system, perhaps without any results of consequence to be regretted. Yet its adoption would be cutting off the power of employing a remedial means often of great value to the patient. A portion of the feeling in England as to restraining measures is based on a delusion. Which is the greater restraint, to shut up a patient disposed to strike upon any sudden impulse in his solitary dormitory, having its light admitted just below the ceiling, or to place large leathern mittens on his hands, and permit him to go into a large court-yard and to walk up and down in the open air? The seclusion within a room is not considered *personal restraint* in the reports referred to.

"Or which is least oppressive to a patient disposed to certain troublesome habits, as abrading the skin of the face by perpetual picking, or plucking out the hair root after root—habits become from neglect so inveterate and involuntary, that even while the physician is dissuading or promising restraint, his hand unconsciously returns to its wonted act—to place the hands in a muff of leather, at once simple, free from pain, and effective, or to trust to the vigilance or the eventually annoying and irritating remindings or restraints of an assistant? Who can doubt as to the comparative advantage of personal restraint from the hands of attendants or of apparatus, in those cases of delirium-like fury, where the sufferer is constantly endeavouring to rise from his bed, and where the presence of faces around him is associated in his blind frenzy with enemies to be contended with, regardless of their numbers. The mind may be in that state where the most soothing attentions are met only with fury and suspicion. How valuable in such a case is the beautiful and simple apparatus, constructed, I believe, by my distinguished predecessor, Dr. Wyman, which holds the sufferer gently in his position on his bed, allowing him almost every natural and proper movement, yet prevents his wearing himself out by constant efforts to rise, and allows every person to leave his immediate apartment, (for his disordered fancy makes cruel enemies of all,) with a certainty that he is safe and comfortable.

"Again, in some highly active forms of the suicidal propensity, where no human vigilance can prevent the consummation of the dreadful act, except, accompanied by the ceaseless application of the force of several persons, a proper restraining means, such as the leathern muff, at once allays the violence of the propensity, by showing the patient that he need not be on the watch to elude his attendants, and that attempts are vain to accomplish his design by force. The best proof of the value of the occasional use of this and other means of vigilance, is manifested in the extraordinary fact, that of the more than six hundred and fifty patients admitted within the last five years, amounting to more than one third of all the inmates during the twenty-three years of the existence of this institution, a single individual only has committed suicide! I cannot here forbear to refer to this remarkable result, as one redounding to the honour of the male and female supervisors, and entitling them in the highest degree to the obligations of the community; for to them necessarily appertains to a great extent the merit of a prompt detection, often no easy matter, and a successful prevention of this sad accident. This result will be duly appreciated when it is considered that the number of those evincing this propensity has sometimes amounted to a dozen, and I have never known the period when no instance existed. I recall also from memory no less than three instances, within as many years, where patients have returned home upon partial convalescence, or from other motives, and resorted almost immediately to the fatal act successfully, although the friends and relatives were forewarned to exert their utmost vigilance by our experience."—p. 19.

Another annual revolution has brought us the Eighth Annual Report of the Trustees of the State Lunatic Asylum, at Worcester, Massachusetts.

The zeal and ability with which the previous reports were drawn up by the superintendent, Dr. Woodward, have always rendered us anxious to receive their successors. It has been a matter of anxious solicitude with us to obtain the means of placing Pennsylvania alongside her sister state of Massachusetts, by having an extensive establishment for the insane poor, and thanks to the legislature and the governor, and to the philanthropic and zealous endeavours of estimable private individuals, of whom Mr. Isaac Collins, of Philadelphia, is one of the most prominent, the state is about to take part in the useful career. The bill—as we remarked in a former number—is now a law, and the appointment of the proper officers by Governor Porter is alone required to commence the good work.

Three hundred and ninety-one patients were in the hospital in the course of the year; 190 of whom were males, and 201 females.

The following remarks, appended to the 13th table "showing the comparative curability of insanity, treated at different periods of disease," are worthy of being cited:

> "From this table we learn that *four hundred and ninety-three* patients have been admitted into the hospital, whose insanity had existed less than *one* year; of these, *two hundred and forty-seven* are males, and *two hundred and forty-six* are females; *four hundred and thirty-eight* of these recovered, and *fifty-five* failed to recover; *twenty-two* died, leaving of those living only *thirty-three* that failed to recover; and making the recoveries, exclusive of the deaths, more than *ninety-five* per cent. This supposes, however, that the *twenty-eight* recent cases now in the hospital will all recover; this will not probably prove true, as some may die, and a few may fail to get well; this may diminish the per cent. *one* or *two*, but can hardly fail to leave it above *ninety*.
>
> "Many of the individuals of this class, not recovered, were removed by their friends prematurely, when the prospect of recovery was encouraging. There remain now not exceeding *four* cases that came into the hospital before insanity had existed *one* year, and but *two* that are certainly incurable.
>
> "There have been in the hospital *one hundred and ninety-two* cases that have been insane from *one* to *two* years, of which *one hundred and eleven* have recovered, and *eighty-one* have failed to recover or have died. The recoveries of this class have been *fifty-eight* per cent., and, exclusive of deaths, about *sixty-two* per cent.
>
> "*One hundred and ninety* patients have been in the hospital whose insanity had existed from *two* to *five* years; of whom *sixty-five* have recovered, and *one hundred and twenty-five* have failed to recover, are considered incurable, or have died. The recoveries of this class are *thirty-four* per cent.
>
> *One hundred and thirty-six* patients have been in the hospital the duration of insanity with whom has been from *five* to *ten* years; of these *sixteen* have recovered, and *one hundred and nineteen* have failed to recover, are considered incurable, or have died. The recoveries of this class are about *eleven and three fourths* per cent.
>
> "*One hundred and forty-two* patients have been in the hospital who have been insane more than *ten* years, of whom *seven* only have recovered, which is less than *five* per cent."

Dr. Woodward has continued his inquiries on the influence of the moon on the insane. His former researches were published in the last volume of the "Intelligencer." The following are his additional observations:

> "We have continued to record facts on the subject of lunar influence, and are able to present a list of *five hundred and thirty-two* paroxysms of insanity as occurring in *sixty-six* periodical cases, in which there were from *two* to *twelve* paroxysms each in the course of the year. We present the following results:
>
> "On the *eighth* day of the moon, which is the *first* day of the *second* quarter, there have occurred the greatest number of paroxysms of any *one* day, viz. *thirty-one*.
>
> "On the *second* day of the moon, which is the *second* day of the *first*

quarter, there occurred *twenty-eight* paroxysms; which is the second greatest number that occurred on *one* day.

"On the *seventh* day of the moon, which is the *last* day of the *first* quarter; and on the *twenty-fourth* day of the moon, which is the *third* day of the *last* quarter, an equal number of paroxysms occurred, which was *twenty-six;* and these make the *third* and *fourth* days in point of numbers.

"On the *fourth* day of the moon, which is the *fourth* day of the *first* quarter, and on the *seventeenth* day of the moon, which is the *third* day of the *third* quarter, *twenty-three* paroxysms occurred, which are the *fifth* and *sixth* in point of numbers.

"It is worthy of remark, that the same days, to the number of *six*, which had the precedence of numbers last year, have the greatest number this year, and that there is no change in the order in which the number of paroxysms appeared. It is also true, that the day on which the fewest number of paroxysms occurred the former years, was the day on which the fewest occurred the last year.

"The greatest number of deaths occurring on any *one* day, took place on the *thirteenth* day of the moon, which is the *sixth* day of the *second* quarter, viz. *seven.*

"On the *second* and *third* days of the moon, and on the *twentieth* and *twenty-first* days, which are the last *two* days of the *third* quarter, and on the *twenty-fifth* day, which is the fourth day of the *last* quarter, an equal number of deaths occurred, viz. *six.*

"On the *sixth* day of the moon, which is the *last* day but *one* of the *first* quarter; on the *sixteenth* day, which is the *second* day of the *third* quarter; and on the *twenty-fourth* day, which is the *third* day of the *last* quarter, an equal number of deaths occurred, viz. *five.*

"*Four* deaths occurred on the *fifth*, *seventh*, *ninth*, and *twenty-eighth* days of the moon. The *six* days on which have, heretofore, occurred the greatest number of deaths, have the greatest number this year; and the *three* days which have had no deaths occur upon them heretofore, have none this past year.

"Having carefully noted these facts as matters of curiosity, if not of importance, we leave the table with its remarkable coincidences, believing that no conclusions can be derived from it, showing the correctness of popular opinion with respect to the moon's influence in producing the periods of excitement with the insane."—p. 64.

From our zealous and benevolent friend, Dr. W. B. Diver, of Macao, we have received the Hospital Reports of the Medical Missionary Society in China, for the year 1839. It is gratifying to observe the beneficial results that are flowing to the Chinese from the combined skill of American and British practitioners.

From the 1st of July to the 15th of August, 167 patients, we are told, were received into Dr. Parker's hospital at Macao. Into the ophthalmic hospital 800 persons were admitted during the year 1839, and since the commencement of the institution in November, 1835, 7000 persons have received the benefits of the charity. The moral and physical advantages of such an institution are incalculable.

MISCELLANEOUS NOTICES.

Transylvania University, Medical Department.—The annual announcement gives the names of two hundred and fifty-four students: of whom there were from Kentcky 132; Tennessee 37; Alabama 27; South Carolina 16;

Indiana 7; Missouri 6; Virginia 6; Mississippi 6; Georgia 4; Illinois 4; Ohio 2; New York 2; Pennsylvania 1; North Carolina 1; Louisiana 1; Maryland 1; Wisconsin 1; and the number of graduates of 1841 was 64.

Jefferson Medical College of Philadelphia.—The annual catalogue contains the names of one hundred and sixty-three students: of whom there were from Maine 4; Massachusetts 3; New Hampshire 3; Connecticut 3; New York 6; New Jersey 14; Pennsylvania 59; Delaware 4; Maryland 6; District of Columbia 1; Virginia 26; North Carolina 3; South Carolina 2; Georgia 3; Florida 1; Alabama 1; Missouri 1; Ohio 11; Louisiana 1; Michigan 2; Lower Canada 1; Upper Canada 1; Nova Scotia 3; West Indies 1; Ireland 1.

University of the State of New York—College of Physicians and Surgeons.—The annual catalogue has the names of 101 students, and of 19 graduates,—session 1840-41.

Medical Statistics.—Dr. M'Ruer, of Bangor, Maine, has written a circular to all health officers, requesting information in regard to the population and mortality of different places for the years 1830 to 1839 inclusive, with the diseases of which the persons died. We trust that an early and careful attention will be paid to the request of Dr. M'Ruer.

Case of Dangerous Uterine Hemorrhage, in which Transfusion was successfully employed, with some observations on the more frequent expediency of that operation. By Richard Oliver, M. D., Carlisle.[1]—On the 26th of June, 1837, I was called to attend the wife of John Cook, a weaver, living at Eden Place, about a mile from my house. She had been attended by a midwife, and had given birth to a child at its full time in the course of the previous night. The patient was about forty-two years of age, and this was her seventh child. I found her at six A. M. in an exceedingly exhausted condition. Blanched by a profuse hemorrhage, which no adequate means had been employed to suppress, but which had now ceased, she was lying on her back in a state of imperfect consciousness, with the pulse at the wrist barely perceptible, now and then moaning lowly, and casting about her arms. About half a glass of rum with a little water was immediately given to her, and this, with a few spoonfuls of beef tea, was repeated two or three times at intervals of about twenty or twenty-five minutes. After each dose she appeared to be a little refreshed, but upon the whole the symptoms of collapse were gaining ground. About half past seven o'clock brandy was substituted for the rum, and the dose was increased to an ounce and a half, with the addition of a drachm of aromatic spirit of ammonia and a few drops of tincture of opium to every second or third portion. The same deceitful promises of reaction were succeeded by the same progressive indications of sinking, until at length, about one P. M., she became quite unable to swallow. The pulse at the wrist and in the carotids had not been perceptible for more than two hours and a half, and the coma was now complete. Under these very unpropitious circumstances I determined on transfusion, with little hope of success, and with no small compunction for having thus afforded the operation so little fair play. At half past one, P. M., I was provided with the apparatus necessary for performing it; and having obtained a willing supply of blood from three of the patient's kind-hearted neighbours, I opened a vein at the bend of her arm, and with the assistance of two of my professional friends, Mr. Bowman, surgeon of this place, and Dr. Henry Lonsdale, now Demonstrator of Anatomy in Queen's College, Edinburgh, I proceeded cautiously and steadily to introduce it.

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[1] Edinburgh Medical and Surgical Journal, Oct. 1840, No. 145; and Brit. and For. Med. Rev., Jan. 1841, p. 260.

I had first taken care to see that the instrument was in proper order, and particularly that I should have the syringe and its tubes free from air. After one or two gentle strokes with the piston, made with a view to ascertain this point, I found that the cup attached to the apparatus was so small that it could not be safely used. Unless the piston was elevated very slowly, and the blood was supplied very steadily to the cup, there was great risk of introducing air into the cylinder. But finding that, by taking a common basin to receive the blood, and by drawing it up thence through the bottom of the syringe, I could obviate this danger, I laid the cup aside altogether. With this simple arrangement I passed syringeful after syringeful into her exhausted veins, pausing from time to time to mark the effects, and anxiously watching for some glimmering promise of the return of energy to her heart. On a moderate computation we had already transfused twelve ounces of blood, and she still lay pulseless and perfectly insensible. The respiration, however, although faint and low, was distinct and regular; so that, however small the amount of blood in her system might be, there was still some undergoing aeration in the lungs; and in gradually augmenting its quantity, we might possibly contribute to raise her vital powers, by enabling a larger portion of it to reach the nervous centres. We could not discern the heart's pulsations, but we might be quite certain that it did beat, and that the general circulation, although thus imperceptible, was still actually carried on. We had yet obtained no assurance of improvement, but it was pretty evident that, by proceeding cautiously, we neither had done nor could do any harm. Without this expedient the poor woman's death was inevitable, and but too probable we then thought even with it; so, disregarding the cautions given upon this point, we determined to go on. Steadily and slowly the blood was introduced as before, until at length we imagined that the pulse became faintly perceptible in the arm; and, slight as it was, this intimation of the heart's increased power gave us no small encouragement. After persevering for a few minutes longer, we had the very perfect gratification of witnessing not only the complete restoration of the circulating power, but the return of consciousness, and of the ability to speak. It is unnecessary to advert to the subsequent details of the treatment and of the recovery, farther than to mention that she went on very favourably, and in a few weeks was moving about in her family as usual. She remained for some time longer rather weak and delicate, but beyond an occasional slight headach, and a tendency to constipation and flatulence, she suffered from none of the more prominent and distressing symptoms which ordinarily ensue after serious losses of blood, and she has long been, and still remains, in very good health. With respect to the quantity of blood introduced in this case, I am not able to speak with absolute accuracy; but I feel quite certain that I am below the mark in mentioning twenty-two ounces. From each of the individuals who supplied the blood we took at least an average of twelve ounces; and although we did not attempt to measure the amount of it, I am perfectly satisfied that, at all events, not more than one third of the whole was lost by coagulation, and by being thrown upon the ground in adjusting and preparing the instrument.

Observations on the Diagnosis and Pathology of Fractures of the Neck of the Femur. By Robert William Smith, A. M., M. R. I. A.[1]—[This is a very valuable memoir, well deserving attentive perusal. We regret that we can only find room for the tabular view of the cases (each of which is detailed in the paper and illustrated by a woodcut), and the conclusions deduced therefrom by the author.]

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[1] Dublin Journal of Medical Science, Sept. 1840; and Brit. and For. Med. Rev., Jan. 1841, p. 262.

Intracapsular Fractures of the Neck of the Femur.

No.	Name.	Age.	Shortening.	Position of the Foot.	Period of survival after the receipt of the injury.
1	Laurence Maguire .	40	½ inch	Eversion	14 days
2	William Collins . .	36	¾ "	"	17 "
3	Thomas Maguire . .	84	½ "	"	14 "
4	Dorah Campbell . .	75	1 "	"	2 months.
5	Mary Gill	80	½ "	"	Not known.
6	Esther Christie . .	60	1½ "	"	" "
7	Mary Lamb	80	¾ "	"	1 year.
8	Margaret Bourke . .	90	½ "	"	14 days.
9	Margaret Myler . .	78	¼ "	"	2 months.
10	A female	65	1 "	"	Not known.
11	Patrick Doolan . . .	60	2 "	"	7 years.
12	Michael Curry . . .	40	1¼ "	"	1 month.
13	Matthew Reilly . .	46	½ "	"	4 months.
14	A female	55	1 "	"	Not known.
15	Sarah Ashton . . .	65	1¼ "	"	9 years.
16	Elizabeth Casey . .	50	¾ "	Inversion	Not known.
17	Robert Robinson . .	50	2 "	Eversion	Several years.
18	Ellen Walker . . .	70	½ "	"	7 days.
19	Laurence Reilly . .	56	2 "	"	Several years.
20	Joseph Seaton . . .	90	1¼ "	"	7 years.
21	A female	65	2½ "	"	Several years.
22	Thomas Connolly . .	50	¾ "	"	10 days.
23	Bridget Misset . . .	72	1 "	"	10 weeks.
Extracapsular Fracture of the Neck of the Femur.					
24	Patrick Murphey . .	80	2 inch	Inversion	14 days.
25	Alicia Harris . . .	70	1½ "	Eversion	5 "
26	James Stanford . .	67	2 "	"	8 "
27	A. B., a man . . .	50	2 "	"	14 "
28	Mary Kelley . . .	56	1¼ "	"	11 "
29	Ellen Bryan	65	1½ "	"	5 weeks.
30	Patrick Grant . . .	70	1½ "	"	5 days.
31	Margaret Connolly .	89	1½ "	"	12 "
32	Thomas Murphy . .	41	Not known.	"	A few weeks.
Impacted Fractures of the Neck of the Femur, external to the Capsule.					
33	John Summers . . .	74	1½ inch	Eversion	2 months.
34	Mary M'Kenna . .	52	¾ "	"	4 days.
35	Catherine Egan . .	60	1¼ "	Inversion	1 month.
36	Sarah Denny . . .	70	1 "	Eversion	1 "
37	Alicia Sherlock . .	64	½ "	"	15 weeks.
38	James Power . . .	54	1½ "	"	5 months.
39	A. B., a female . . .	80	Not known		Not known.
40	Not known	...	... ...		... ...
41	Bryan Dunn	60	¼ "	"	13 days.
Impacted Fracture of the Neck of the Femur, internal to the Capsule.					
42	Owen Curran . . .	70	½ inch	Eversion	1 year & 10 mo.

From what has been stated in the preceding pages, and from the evidence afforded by the *post-mortem* examination of fifty specimens of fractures of the neck of the femur, forty-two of which have been detailed, I think I am justified in deducing the following conclusions:

1. A slight degree of shortening, removable by the extension of the limb, indicates a fracture within the capsular ligament. 2. The degree of shortening, where the fracture is within the capsular ligament, varies from a quarter of an inch to one inch, or one inch and a half. 3. The degree of shortening, when the fracture is within the capsule, varies chiefly according to the extent of laceration of the fibro-synovial folds which invest the neck of the femur. 4. In some cases of intracapsular fracture the injury is not immediately followed by shortening of the limb. 5. This absence of shortening is generally owing to the integrity of the fibro-synovial folds. 6. In such cases the retraction of the limb may occur suddenly, many weeks after the receipt of the injury. 7. This sudden retraction of the limb, which indicates a fracture within the capsule, is, in general, to be ascribed to the accidental laceration of the fibro-synovial folds. 8. The degree of shortening, when the fracture is external to the capsule and not impacted, varies from one inch or one inch and a half, to two inches or two inches and a half. 9. When a great degree of shortening occurs immediately after the receipt of the injury, we usually find a comminuted fracture external to the capsule. 10. The extracapsular fracture is generally accompanied by fracture with displacement of one or both trochanters. 11. The extracapsular *impacted* fracture is generally accompanied by fracture without displacement of one or both trochanters. 12. In such cases the fracture of the processes unites more readily than that of the cervix. 13. The degree of shortening, when the fracture is impacted, varies from a quarter of an inch to one inch and a half. 14. The exuberant growths of bone met with in these cases have been by many erroneously considered to be merely for the purpose of supporting the acetabulum and the neck of the femur. 15. The difficulty of ascertaining crepitus, and of restoring the limb to its natural length, are the chief diagnostic signs of the impacted fracture. 16. The position of the foot is as much influenced by the obliquity of the fracture and the relative position of the fragments, as by the action of the muscles. 17. Inversion of the foot may occur in the intracapsular, extracapsular, or impacted fracture of the neck of the femur. 18. When in the intracapsular fracture the lower fragment is placed in front of the upper, the foot is usually inverted. 19. When in the extracapsular fracture with impaction, the superior is driven into the inferior fragment, so as to leave the greater portion of the latter in front of the former, the foot is generally inverted. 20. In cases of comminuted extracapsular fracture without impaction, but with separation and displacement of the trochanters, the foot may be turned either inwards or outwards, and will generally remain in whatever position it has been accidentally placed. 21. The consolidation by bone of the intracapsular fracture is most likely to occur when the fracture is also impacted. 22. Severe contusion of the hip-joint, causing paralysis of the muscles which surround the articulation, is liable to be confounded with fracture of the neck of the femur. 23. The presence of chronic rheumatic arthritis may not only lead us to suppose that a fracture exists when the bone is entire, but also when there is no doubt as to the existence of fracture, may render diagnosis difficult as to the seat of the injury with respect to the capsule. 24. Severe contusion of the hip-joint, previously the seat of chronic rheumatic arthritis, and the impacted fracture of the neck of the femur, are the two cases most liable to be confounded with each other. 25. Each particular symptom of fracture of the neck of the femur, separately considered, must be looked upon as equivocal: the union of all can alone lead to correct diagnosis.

On the Use of the Tincture of the Muriate of Iron in Diabetes Mellitus. By Charles Clay, Esq., Surgeon, Manchester.[1]—The folllowing three cases yielded so decidedly to the use of the tinct. ferr. mur. P. L., after many other remedies had been tried, that I trust that placing them before the public will be the means of testing its merits still further. It is quite necessary, in order to succeed, to give it in large does, as I have repeatedly tried the same remedy in small doses without any effect. The cases I am about to give were of sufficient standing as to time and obstinacy (and could only be considered bad cases), and of such a character that the trial of any new remedy was perfectly justifiable.

Case 1.—James Newton, of Ashton-under-Lyne, February, 1836, aged 75 years, had been for two years suffering from diabetic flows of urine, which for nine months had considerably increased; he had been under the care of different persons, and a variety of remedies were tried, but no abatement of the symptoms was observable. When he applied to me, the quantity of urine discharged was nine pounds and a half by weight in twenty-four hours, fully charged with saccharine matter; his appearance was emaciated, anxious countenance, and a dry, furred tongue. After trying various plans, without any apparent benefit (with the exception of temporary relief for a few days by the exhibition of nitrous acid), at last, without any particular hope of benefit, I ordered the following mixture:

Tincture of opium, ʒjss;
Tincture of muriate of iron, ʒij;
Sulphate of quinine, grs. viij;
Distilled water, ℥vj. An ounce to be taken three times a day.

After continuing this formula for three days, I was agreeably surprised by a sensible abatement of the quantity of urine, but still as fully charged with saccharine matter; in five days more (that is, eight from the commencement), the abatement continued; the countenance less anxious, tongue clean, and evidently improving in constitution. On the eighteenth day, barely four pounds of urine were discharged in twenty-four hours, in which little saccharine matter could be detected. In four weeks, with a continuation of the medicine, he appeared in perfect health, and at the end of six weeks ceased taking medicine entirely, and since has had no return of the complaint.

Case 2.—W. Grundy, aged 30, of Hurst, came under my care in April, 1838, after being treated by different persons without any apparent benefit. From the decided success of the tinct. fer. mur. in the case of Newton, I began immediately with the same dose, as above stated. The quantity of urine was, at the commencement, eight pounds in twenty-four hours, and full of saccharine matter. For five days no improvement in either the quality or quantity of the discharge was observable; after that time, however, the abatement began to show itself, but without any diminution of the saccharine principle. On the fourteenth day, the diminution of the discharge was remarkable, not more than three pounds and a half in twenty-four hours, and the character of the urine much less sweet. On the twenty-fourth day the discharge was natural in quality as well as quantity, and before the expiration of five weeks he left off taking medicine.

Case 3.—Mary Wild, aged 56, of Ashton, had been subject to a diabetic discharge for eight months; her general health had for some time been very precarious, from the cessation of the menstrual discharge: about seven pounds and a half of urine in twenty-four hours. In this case the saccharine matter was not so abundant as in the former cases. I gave the tinct. fer. mur. mixt. for six days, when a slight abatement was observable; but on the twelfth day the quantity was more than at the commencement. On the fifteenth day the abatement again showed itself: and from this time to the end of four weeks kept continually decreasing. At this time pleuritic symptoms called for a cessation of these remedies and a substitution of others, during which time a slight increase of urine came on; but on going on with the old medicine the improvement returned. She finally ceased taking medicine at the end of eight weeks, feeling her health quite restored, and has had no return since. The date of this case was March, 1840.

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[1] Lancet, Oct. 10, 1840; and Brit. and For. Med. Rev., Jan. 1841, p. 265.

Mr. Combe.—It was with no little regret that we observed in the volumes of Mr. Combe on the United States, which have just been published, an allusion evidently to a private conversation which took place at a dinner table, in which Mr. Combe makes the editor of this journal do Dr. Beaumont the signal injustice of stating, that the suggestions and experiments made at Washington, and detailed in Dr. Beaumont's book, were by the editor.

The error is another instance of the difficulty and impropriety of travellers attempting to detail private conversations. Mr. Combe was informed, that certain suggestions were made to Dr. Beaumont, and certain experiments performed by the editor in Washington along with him, whereas the observation of Mr. Combe would lead to the inference that Dr. Beaumont himself suggested and performed none of them.

The editor of this journal has been extremely careful not to detract from the results of the meritorious and persevering investigations of Dr. Beaumont, and it is painful to him to have the subject brought forward in this manner. It is strange, indeed, that Mr. Combe should not have seen the injurious effect of such a statement to one party, even if the impropriety of attempting to detail private conversations had not impressed him.

Jefferson Medical College,—Reorganisation.—It is with the greatest gratification that we announce the reorganisation of this college, with a corps of professors whose names and professional acquirements are known over every portion of this country. At a late meeting of the board of trustees, the following professors were unanimously appointed to the respective branches:

Dr. Dunglison, Institutes of Medicine and Medical Jurisprudence.
Dr. Huston, Materia Medica and General Therapeutics.
Dr. Pancoast, General, Descriptive, and Surgical Anatomy.
Dr. J. K. Mitchell, Practice of Medicine.
Dr. Randolph, Practice of Surgery.
Dr. Mütter, Institutes of Surgery.
Dr. Meigs, Obstetrics and Diseases of Women and Children.
Dr. Franklin Bache, Chemistry.

Of these gentlemen Drs. Dunglison, Huston, and Pancoast are medical officers of the Philadelphia Hospital; Drs. Randolph and Meigs of the Pennsylvania Hospital; and Dr. Mütter is surgeon to the Philadelphia Dispensary.

With the college thus fitly organised, the effect must be to render Philadelphia still more the centre of medical education in the Union. The higher the reputation of the schools, and the more harmonious their co-operation in the great work of medical instruction, the more certainly must this result be accomplished. Unworthy rivalry should be abolished, but an honourable competition as to which institution can be most extensively useful to the profession and the public should endure.

THE

AMERICAN MEDICAL INTELLIGENCER.

Vol. IV. March 15, 1841. No. 24.

For the American Medical Intelligencer.

ART. I.—ON THE PRESENCE OF KIESTEINE IN THE URINE AS A TEST OF PREGNANCY.

Philadelphia Hospital, April 12th, 1841.

To Professor Dunglison.

Dear Sir,—At your suggestion we have instituted a series of experiments for the purpose of ascertaining the existence of kiesteïne in the urine of pregnant women. They have been conducted after the manner pursued by Dr. Golding Bird, as published in Guy's Hospital Reports, of April, 1840. Daily observations were made, and every change as it presented itself carefully noted. The results of our observations are as follows: The urine of twenty-four out of twenty-seven women, in different stages of pregnancy, from the second to the ninth month of utero-gestation, on the second day began to lose its transparency; on the third, became quite opalescent. From the second to the fourth day, a whitish scum made its appearance, which, as described by previous observers, might aptly be compared "to the layer of greasy matter which covers the surface of fat broth when it has been allowed to cool." This continued to increase until the fifth or sixth day, when, in each case, it was so unequivocally marked as not to be mistaken. From this until the fourteenth day, when the observations closed, the pellicle became gradually thinner by the detachment and subsidence of flocculi, though it never entirely disappeared. The odour, which was peculiar, could not be recognised by us as "cheesy," although our attention was particularly directed to this point. The filtered specimens of the same urine underwent similar changes.

Of the three remaining cases, in which the pellicle did not appear, one was labouring under peritonitis, and subsequently had an attack of puerperal fever, and another had incipient phthisis. We are unable to say whether the third was labouring under disease or not.

The urine of one suckling woman, two weeks after delivery, presented all the characteristics of kiesteïne. That of two others, twelve months after delivery, whose children were still at the breast, underwent no change.

So far as we observed, the presence or absence of milk in the breasts, previous to delivery, appeared to exercise no influence over the formation of the scum.

An elevated temperature of from 60° to 80° appears most favourable to the speedy and perfect formation of the kiesteïnic pellicle, whilst one low enough to freeze the urine occasionally prevents or very materially retards the process. This may perhaps account for some apparent discrepancies between our observations and those of Dr. Bird, as some of our experiments were conducted at rather a low temperature.

By way of instituting a comparison at the same time, the urine of twenty-seven unimpregnated women was submitted to examination, but underwent no changes indicative of kiesteine. Of these, twelve were regular and healthy, nine were labouring under gonorrhœa, and were generally irregular. Three had chronic leucorrhœa, two indolent ulcers on the leg, and one was in the last stage of phthisis. The six last mentioned also had amenorrhœa of long standing.

The urine of four healthy men, and of two labouring under catarrh of the bladder, underwent no change.

From the nature of our situation, we had an opportunity of tracing the history of each case examined. The urine, in every instance, was that first voided in the morning, and that of no one was taken who did not remain long enough in the house either to be delivered or to place their state beyond a doubt.

From what has hitherto been published on this subject, as well as from the further observations made by ourselves, it will be seen that this matter is worthy of further investigation; and that whilst it cannot be relied on as an absolute test of pregnancy, yet when taken in conjunction with other symptoms, it forms a valuable aid to diagnosis. As illustrative of this fact, we may state the following cases, which came under our own observation.

Nov. 10th, 1840. Margaret M'Guire, æt. 26. Entered the venereal ward with gonorrhœa; had not menstruated for two months. She applied to the physician in attendance for emmenagogues, which were administered, as no other sign of pregnancy existed. At the same her urine was taken as a healthy specimen; but the appearance on the third day of a perfectly marked kiesteinic pellicle caused the treatment to be discontinued. She is now in the obstetrical ward, in so advanced a stage of undoubted pregnancy, as to prove her at that time to have been in the second month.

Susan Rhodes, æt. 23, assistant nurse. Had a cessation of the catamenia for three terms after a visit from her husband, a seaman. Her breasts enlarging and becoming painful, with morning sickness; she supposed herself pregnant. Alarmed at experiencing pain in the region of the pelvis, accompanied by a bloody discharge for several days, she applied, Nov. 20th, 1840, for medical treatment to prevent abortion. She was put to bed, and her urine submitted to examination. As it exhibited no appearance of kiesteine, on the fifth day she was allowed to resume her occupation, and has since been perfectly regular.

Lavinia Horner, æt. 32. Entered the medical ward Dec. 13th, 1840. She had been treated in the city for amenorrhœa, produced, as she says, from exposure to cold. On examination by Dr. Dunglison, then in attendance, she was suspected of being pregnant, notwithstanding her solemn protestations to the contrary. On the third day, her urine presenting the decided characteristic pellicle, she was transferred to the obstetrical ward, and during the last month was delivered.

Mary Brown, æt. 35, (coloured.) Entered medical wards Jan. 12th, 1841, in an advanced stage of phthisis, accompanied by enlargement of the abdomen. Has had several children; supposed herself pregnant, and stated that quickening had taken place a month previously. Her urine, however, presented no traces of kiesteine. A few weeks afterwards she died, and on examination, the enlargement of the abdomen was found to depend upon ovarian dropsy, while the uterus was perfectly normal.

We are, sir, very respectfully,

Wm. M. M'Pheeters, } Resident Physicians.
J. C. Perry, }

Art. II.—ANATOMICAL DESCRIPTION OF AN HERMAPHRODITE, KNOWN BY TURNS UNDER THE NAMES OF MARIE-DOROTHE DERIER AND CHARLES DURGE.

BY PROFESSOR MAYER, OF BON.[1]

Translated from the French, by O. H. Partridge, M. D., Philadelphia.

This remarkable individual whom we are about to describe, has been known to the medical community for more than thirty years, at first by the name of Marie-Dorothé Derier, afterwards by that of Charles Durgé. Born at Berlin or Potsdam in 1780, he was baptised as a female child. At twenty years of age he still continued to wear the clothing and follow the occupation of females moving in the same grade of life; it was about this time that he was first spoken of in the public journals. Hufeland made mention of him in his journal for 1801; and notwithstanding the perspicacity of this patriarch in German medicine, he gave it as his opinion that the attributes of the female sex were predominant with Derier.

During the years 1816 and 1817, Derier, who had learned to model in wax, visited the different universities in Germany, and traveled into France, Holland, and England, where he was employed in most of the anatomical museums. He was examined by a great number of medical gentlemen and men of science; among whom were Kopp, Kausch, Mursina, Rosenmüller, Osiander, Lawrence, Green, and the faculty of medicine in Paris, the most of whom gave it as their opinion that he was of the masculine sex. Hufeland, whom we have already mentioned, Gall, and Brooks, declared in favour of the feminine. While others, and among them Drs. Schneider and Lauth, Schmidtmüller and Ritgen, were of the opinion that Derier belonged to neither sex; the different parts of the body were considered as appertaining to the masculine and partly to the feminine. The pelvic basin only was considered by the most of them as the basin of the female; notwithstanding, the anatomical inspection, as we shall see, has demonstrated to the contrary.

Supported by the opinions of a majority of physicians, who had pronounced him of the masculine sex, and stimulated by a sort of vanity, Derier assumed the dress and mode of living usual among men, and caused himself to be called Charles Durgé. Under this name he continued to live in Bon, from 1820 to the time of his death, which occurred in March, 1835. During the latter period of his life he was constantly under the observation of M. Mayer. Durgé, said he, was pleased to be in the society of males, but evinced a greater predilection for that of females, yet entertained towards neither of them any amorous propensities. His character was a *mélange* of the man and the woman: on the one part, he had courage unusual to one of his size—he possessed great physical strength, and loved to rule; and, on the other, distinguished himself for great manual dexterity, as his works in wax were always well and faithfully made. He was animated with sentiments mild and affectionate, yet at the same time possessed a certain spirit for contradiction.

During the last years of his life there was no evidence of a catamenial discharge from the genital organs, as there had been two or three times during his twentieth year, yet he was subject to epistaxis and hæmorrhoids, phenomena which were attributed to his manner of living, as he indulged freely in the use of wine, coffee, and spirituous liquors. Durgé never had pollutions or ejaculations of semen. His voice became more hoarse and strong as he advanced in age; his beard was light and thin; all his hair had fallen off, with the exception of a few locks that hung long and pendant from behind the occiput. His head and face presented the aspect of an old woman; the teeth also were nearly all gone; neck short; chest fat and round; arms and legs slightly covered like those of the female; his height, which was taken at the time he was thirteen years of age, when he had arrived at his full stature, was five feet.[1] At thirty-eight there was a complete change in his constitution, and he became very gross and portly; he enjoyed most excellent health, with the exception of a nervous fever, which attacked him when he was about forty years old. He continued thus to live until three years previous to his death, when his memory failed, and he lost all taste for his works in wax. In the month of March, 1835, his countenance assumed a haggard aspect for a number of days, at the end of which Durgé or Derier succumbed suddenly of a violent attack of apoplexy. The autopsy was made by Professor Mayer, one of the most distinguished anatomists of Germany. M. Mayer was exceedingly minute in his examinations, which might have been thought by some unnecessary, had they not been justified by the importance of the subject.

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[1] Medical Examiner, April 10, 1841.

We have thought it our duty to report faithfully the description of the professor in Bon, because it has thrown much light upon the true nature of an individual who had enjoyed a certain celebrity in consequence of the great difficulty that had existed to determine to which sex he belonged. It proves to us, moreover, that there does exist among the human species true hermaphrodites,—that is, the organs male and female in the same individual.

Autopsy, exterior.—Length of the body, 5 feet; length of the superior extremities, from the condyle of the humerus to the end of the middle finger, 2 feet 4½ inches; inferior extremities, from the great trochanter to the heel, 2 feet 10¾ inches. Form of the head feminine, small, os frontis narrow and low: occiput prominent; hair thin, and covering only the occipital region; beard very thin; neck short; larynx slightly projecting; breadth of the shoulders 1 foot 2 inches; superior portion of the thorax narrow and short; abdomen of good length; breasts very well developed, but the nipples shrunk; pelvis not large; pubien arch of a medium width; curve of the arms and legs like those of a female.

Description of the internal organs.—Tongue short, large, and ovoid; papilla long, and of a natural size; os hyoides small, but well developed; the thyroid cartilage forms but a slight projection, is very narrow, but of a tissue sufficiently hard throughout; thyroid gland quite large; cornua thyroidea, superior and inferior, very long; the ligaments of the thyroid and cricoid cartilages strong and well developed; epiglottis short and large; cavity of the larynx moderately large, nevertheless, the vocal chords, superior and inferior, are sufficiently thick and strong; trachea narrow, and its cartilages more soft than those of the male. *Lungs* small; the right lung is divided only into two lobes by a fissure incomplete and not very deep: the left also is divided and adherent to the parieties of the thorax, the pericardium and diaphragm; the right lung, with the exception of a few arthritic tubercles of the size of peas, is healthy; the left contains a large number of these concretions, particularly on the internal edge of the superior lobe. *Heart* fat, large, round, and resembles the heart of a female; its structure is normal, and the muscular tissue well nourished; the division of its vessels from the arch of the aorta natural. The stomach is of an oblong form and not very muscular. *Spleen* small, and only 2 inches 10 lines in length, and 1 inch 8 lines broad. *Liver* of a medium size, biliary ducts contain a large number of calculi. Intestinal canal normal; cœcum large; appendicula vermiformis large. *Mamma* tolerably well developed, the glandular granulations are wanting, but in their place are found a quantity of small globules, fatty, and of a reddish yellow appearance; the nipple projects but slightly, and is pierced by a great number of minute holes, which are evidently sebaceous follicles, and situated only about the areola. *Kidneys* oblong, thin, and small; renal capsules normal.

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[1] We here make use of the French measure, which the reader will recollect is a little longer than the English,—12 French inches being equal to about 13 English inches.—*Trans.*

The *encephalon* is small, and presents entirely the form and organisation of that organ in the female; its form is round and symmetrically convex; lobes not prominent, convolutions numerous, but narrow; dura mater and pia mater are of an extremely delicate texture; pons varoli and medulla oblongata small; the nerves, and particularly the fifth pair, are more delicate than in the male; the cerebellum is also small, and its right hemisphere in particular is much less voluminous; in fact all the lobes appear to have been arrested in their developement; the lamina are numerous; the cerebrum presents also a want of developement in its right hemisphere, as is indicated by a depression at the lobes; corpus callosum short; thalami nervorum opticorum, corpora quadrigemina, pineal gland and corpora striata, are below the natural size. *Cranium* small; its bones thin, but solid; sutures not effaced; bones of the face tolerably well developed; ossa maxillaria superiora destitute of teeth; in the ossa maxillaria inferiora two molar and three incisors still remain; mastoid processes large, and of a very firm texture; os frontis slightly projecting, but the summit of the cranium and the occiput, which contain the posterior lobes, are quite large; the prominences corresponding to the cerebellum not well developed, the left saillant and the right quite smooth; vertebral column regularly formed, but the vertebræ, especially the cervical and thoracic, are of rather delicate texture; ribs brittle and thin; the third, fourth, fifth, sixth and seventh on the left side have been fractured, the four first in two places, the last in one only; the fractures now are consolidated, and quite firm; the pleura adheres at three different points, and also to the lungs; the sternum, particularly its superior portion, is quite large; thorax uncommonly narrow, more especially its middle portion, while its lower section is also of good size.

The bones of the superior extremities are proportionally well developed, but present a feminine character, particularly the clavicle and scapula; the first is short, rounded, thin, and very curved,—the fore-arm forms with the arm an angle from without, a little unusual; the hands are small like those of the female; lumbar vertebra rather small; sacrum large; sacro-vertebral angle slightly prominent. The bones of the pelvis are strong and solid, and in general narrow, presenting in an evident manner the configuration of the pelvis of a male; its greatest transverse diameter, from the crest of one ilium to the other, is 9 inches; from the anterior superior spinous process of one ilium to the opposite it is 7 inches and 3 lines; transverse diameter of the superior strait, 4 inches 5 lines; antero posterior, 3 inches 4 lines; oblique diameter, 4 inches; transverse diameter of the inferior strait, 3 inches 3 lines; antero posterior, 2 inches 6 lines; symphisis pubis long and narrow; the arch of the pubis is like that of the male, and forms an angle of 65 degrees; the lateral portions of the ilium have a vertical direction; cotyloid cavities are flat and turned forward; sciatic tuberosities look downward and inward; the whole of the pelvis is a little unequal and oblique, inasmuch as the right half of the small basin is smaller and more narrow than that of the left, and the sacro-vertebral angle greater towards this side; osseous tissue of the inferior extremities very delicate; neck of the femur short; trochanters feeble; knees a little crooked from within.

Description of the genital organs in particular.—Mons veneris slightly elevated; the hairs that cover it are thinly scattered, and do not extend as far as the umbilicus; perineum and anal region also only partially covered. Length of the penis to the glans two inches; the glans itself nine lines; penis mostly covered by the mons veneris; corpus cavernosum equally well developed, presenting each one a perpendicular diameter of eight lines, and together a transverse diameter of four lines, divided by a septum; corpus spongiosum wanting; the prepuce covers but about half of the glans; and a little on the under side is found an opening, *fossette naviculaire*, or small canal, which represents the canal of the urethra, closed, and is formed of two folds of skin, stretched backwards, and which resemble the nympha; this small canal leads to an opening, round, and about the size of a goose quill; the external labia, the skin of which is wrinkled, forms the posterior edge of this opening, and the mucous tissue, smooth and glossy, its anterior; at the anterior or superior border are to be seen two longitudinal folds of skin, between which is a small canal representing the canal of the urethra, and runs in a direction inward; at the edges of the internal labia are also seen the vestiges of the curunculæ myrtiformis; the circular opening continues, with a vestibule of eight lines in length, and merges above into the canal of the urethra, and below into a larger canal which resembles a vagina; the septum that divides at this place the vaginal and urethral canals is semilunar in form, and is placed horizontally; the canal of the urethra is near the racine of the penis, and is at the same time surrounded by the prostate, which is firm, but not very thick; neck of the bladder, and the bladder itself, are regularly formed; the latter, particularly, is very muscular, and its membranes dense and strong; the mouths of the ureters present nothing singular. The canal which represents the vagina is composed of a delicate mucous tissue, and has but few muscular fibres, and is partially filled with a greenish mucus; at its commencement it is surrounded by a tissue, rectiform and vascular, and easily separated; this tissue is composed mostly of varicose veins, which continue upwards between the vagina and uterus, and finally disappear; at this place are seen a number of veins coming out, and a large artery entering. Length of the vaginal canal two inches eight lines; diameter of the external orifice where it is the largest, ten lines; posteriorly, it is only six lines; in its internal surface anteriorly it is a little corrugated,—farther back, smooth, but garnished with a great number of small warts, where are to be seen also radiated or star-formed cicatrices. The vagina terminates interiorly by a narrow portion or sort of isthmus of a spongy texture, and of from four to six lines in length; behind this isthmus, which represents the imperforate orifices of the uterus, is found the uterus itself, which continues upwards with the oblique direction of the vagina, behind and between the bladder and rectum, with a slight declination from right to left, so that its base is seen on the left side of the bladder, at the point of union between the body and base of this organ.

The *uterus* is extremely narrow; length two inches six lines; neck quite small, yet it is not difficult to distinguish that it has a neck, body, and fundus; there is nothing remarkable in the internal surface, except some small folds, and a number of small spots of a yellowish brown colour; its cavity, which contains a gelatinous mucus, is much narrower than that of the vagina, and will hardly receive a goose quill; its fundus is a little larger, and will measure nearly six lines; the body of the uterus exhibits a few corrugations or folds, and a number of hydatiform vesicles, mixed here and there with yellow spots.

The two fallopian tubes open exactly at the fundus of the uterus, but in length are unequal; the left tube being three inches four lines, and the right four inches four lines; the tube of the canal is small, but perfectly permeable to the abdominal opening, which is imperforate, and where are discovered a number of hydatids; corpus fimbriatum plainly to be seen; the muscular fibres are very strong which are given off from the fundus of the uterus, under the peritoneum, and which pass over its anterior portion and the bladder in a direction towards the inguinal ring, and finally are lost in the adipose tissue of the external organs. In the right side, near the open extremity of the fallopian tube, is a small, flat, ovoid body, from which are given off a bundle of vessels and muscular fibres, and entirely enveloped in the peritoneum; its form is that of a small almond; its parenchyma is evidently composed of a yellow, soft, and filamentous tissue, resembling exactly that of the testicle; the vesiculæ seminales may easily be dissected, and in the cord are to be seen the artery and vein. On the right side, behind and a little without the abdominal opening of the fallopian tube, there is also a small, round, flat body, enveloped in the peritoneum, but its tissue is gelatinous, and composed of small grains, so conglomerated as to resemble rather an ovary than a testicle.

We here see the mixed attributes of a male and female; on the one part a testicle slightly atrophied, also a penis and prostate gland; on the other, a vagina and uterus with its fallopian tubes, and on the left side a body analogous to an ovary. M. Mayer has also observed as a fact worthy of special notice, the very slight developement of the hemispheres of the cerebellum, an anomaly that Gall predicted when Derier or Durgé was twenty-five years of age, in consequence of the indifference exhibited by him for either sex. It is also a fact, that on the right ride, where the cerebrum, and particularly the cerebellum, were imperfectly developed, there exists in the abdominal cavity but one thing doubtful, that is, the body which was supposed to be an ovaria; while on the left side there is certainly a testicle, although not of full size.

Finally, M. Mayer adds, he never has observed this defect in the organisation of the cerebellum in any other case of hermaphroditism, either in the male or female.

Art. III.—RHINOPLASTIC AND CHEILOPLASTIC OPERATIONS.[1]

BY J. PANCOAST, M. D.

Professor of Anatomy in Jefferson Medical College, one of the Surgeons of the Philadelphia Hospital, &c.

Jno. Glover, æt. 50, a native of Bridgewater, in England, lost, seven years ago, as he states, by phagedenic ulceration, all the soft parts of the nose, the whole of the upper lip, the turbinated bones and septum of the nostrils. Though now in good health and robust, he appears an object of deformity so disgusting to himself, that he has voluntarily exiled himself from his family and home. On examination, it was found that the teeth with their sockets had all disappeared from the upper jaw, and nearly all from the lower: a small strip of gum, a quarter of an inch wide, stretched across, and formed the only separation between the lower lip and the ends of the ossi nasi.

In consequence of the destruction of the upper lip and the sockets of the teeth, the chin came high up on the face, and the lower lip fell on the margin of the nasal cavern.

The cicatrisation following the destruction of the upper lip and nose had drawn in the angles of the mouth, so as to leave a round opening of not more than three quarters of an inch in diameter when the mouth was opened to the widest extent.

Jan. 20th, an operation was performed before the class of the Philadelphia Hospital, for the enlargement of the mouth and the reconstruction of the upper lip. The mouth was widened after the manner of Dieffenbach, for about five eighths of an inch at each angle, by removing a slip of the muscle and integuments in front of the mucous membrane, and then dividing the membrane in two, and binding each half by suture over the raw edges of the new lip. A flap of integument was then raised from the muscles of each cheek, an inch in breadth and an inch and a half in length, and brought down and fastened together by hare lip sutures in front of the gum, which had been previously made raw with the knife. The operation succeeded. The new lip became perfectly adherent to the gum, and presented a natural appearance.

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[1] Medical Examiner, April 10, 1841.

March 27. Proceeded to the rhinoplastic part of the operation. A flap of the integuments was raised from the forehead, nearly of a pyramidal shape, three inches long and three inches broad at the base, having an adherent strip raised from the scalp on the middle line an inch and a half long and five eighths of an inch broad, to form the columna of the new nose. The flap was dissected up, remaining attached only by a pedicle between the eyebrows, and twisted so as to present its raw surface over the opening of the nose. The integuments of the forehead and scalp were then brought together with hare lip sutures, leaving only a small opening to fill up by granulation the size of a twenty-five cent piece. A groove was cut along the sides of the nasal cavern into which the flap of the new nose was stitched. The new columna from the scalp was bent in, and fastened with hare lip pins to the upper margin of the gum, and the new lip formed on the 20th of January, and which were freshened with the knife for its insertion. The entire operation lasted a little over an hour, and was borne by the patient without a murmur. 31st. The dressings were removed, the wound in the forehead and scalp were found united, except in the middle space, by first intention. The new nose and the column had also united every where by first intention, and retained in a great degree the natural prominence. The patient suffered but little pain or inconvenience since the operation, and has the fairest prospect of having his hideous deformity entirely removed. The details of this case will be hereafter more fully given, as well as those of another case, in which the operation was performed by Dr. Pancoast on the 9th of January last. In the latter instance, the nose, which had been lost by scrofulous ulceration, attended with a destruction of a considerable part of the hard palate, was rebuilt by flaps from the cheeks, and the operation has been so completely successful, as to require a careful inspection to distinguish it from the natural organ.

BIBLIOGRAPHICAL NOTICES.

Transactions of the Medical Society of the State of New York.[1]

This part of the Transactions of the active Society of the State of New York contains the following articles:—Annual Address on Inflammatory Fever, by Sumner Ely, M. D.; Prize Dissertation on the Nervous System, by Nathan S. Davis, M. D.; Observations on Ergot, by J. B. Beck, M. D.; Observations on Aneurism, by Placide Portal, M. D.: and an Address before the Renssellaer County Medical Society, by Daniel Haynes, M. D. The appendix is occupied by an abstract of the proceedings of the society at its annual session, Feb. 1841; a list of officers of the county medical societies; legislative documents; regulation of medical fees of the superintendents of the poor, &c. &c.

Hamilton's Lecture on Phrenology.[2]

Dr. Hamilton has taken decided grounds in this pamphlet against phrenology, and will of course be regarded unfair and perhaps feeble by those who consider that they alone possess all knowledge on the subject. One thing stated by him surprises us, that *we* are "often quoted as favouring phrenology." The pages of this journal have sufficiently shown, that whilst we respect the honest convictions of others who embrace the opposite view, the evidence adduced in favour of phrenology, backed as it has been by the zeal of its apostle, who lately visited this country, has been altogether insufficient to convince us of the truth even of its positions.

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[1] Vol. v. Part 1. Albany, 1841.

[2] Lecture on Phrenology, by Frank H. Hamilton, M. D., Professor of the Theory and Practice of Surgery in Geneva Medical College and the Vermont Academy of Medicine. Delivered before the Rochester Athenæum, Feb. 9, 1841. 8vo, pp. 32. Rochester, 1841.

The lecture of Dr. Hamilton exhibits great energy of character and much research, and must have been well received by his audience.

Tweedie's Library of Medicine. Dissertations on Diseases of the Digestive, Urinary, and Uterine Organs.[1]

This is another of those valuable volumes for which we are indebted to the enterprising publishers who have undertaken the series. The articles are shorter than those of the preceding volumes, but they are not the less satisfactory; whilst they permit the ground to be covered by a greater variety.

We can strongly recommend the whole series to the notice of the practitioner and student. The authors are all men of science and observation, and they are evidently on a level with the improved knowledge of the day.

Twenty-fourth Annual Report of the State of the Insane Asylum at Frankford.

The report before us exhibits this valuable institution in a favourable light. The number of patients during the year was 110; of whom 52 were discharged; 58 remain in the house.

The report of the physicians exhibits that they are alive to the responsible position they occupy, and deeply imbued with the existing improved views as to the best treatment of the insane.

Gibson's Rambles in Europe.[2]

We had occasion, in our last volume, to draw favourable attention to sketches of living characters abroad, as given by Professor Gibson, in his introductory lectures to the students of the University of Pennsylvania. The volume before us contains those sketches, with numerous others of distinguished individuals, whom its author met with in Great Britain, Ireland, and France. On these additional sketches the same encomiums may be passed as on the former. Most of them are decidedly complimentary, and perhaps deservedly so; there are others, however, which may gratify the reader more than the parties immediately interested.

Of the eminent surgeon, whose death has been recently announced, it may be interesting to read Professor Gibson's description, from personal observation two years ago:—

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[1] By W. Bruce Joy, M. D.; J. A. Reynolds, M. D.; George Budd, M. D.; William Thomson, M. D.; Robert Christison, M. D.; Robert Ferguson, M. D., and Dr. Simpson. Edited by Alex. Tweedie, M. D., F. R. S., &c., with notes by W. W. Gerhard, M. D., &c. &c. 8vo, pp. 516. Philadelphia, 1841.

[2] Rambles in Europe in 1839, with Sketches of Prominent Surgeons, Physicians, Medical Schools, Hospitals, Literary Personages, Scenery, &c. By William Gibson, M. D., Professor of Surgery in the University of Pennsylvania, &c. &c. 12mo, pp. 309. Philadelphia, 1841.

"It was natural I should wish to see the Wellington of British surgery, as Sir Astley Cooper has been emphatically styled. I had attended his lectures occasionally, and witnessed his operations in Guy's and St. Thomas's hospitals thirty years before; I was familiar with his writings and high reputation at home, abroad, and, indeed, throughout the civilised world, and felt no ordinary desire to form the acquaintance of one who, in addition to the highest professional renown, was allowed, by common consent, to be among the most finished gentlemen of the day; I repaired, therefore, to his house, without any introduction whatever, was ushered into his presence, and received with a courtesy and urbanity I was totally unprepared to expect; for, upon my name being announced by the attendant, he came forward with ease and alacrity, and expressed, in the kindest possible way, his pleasure at meeting one connected with a university he had long known by reputation, and with some of whose professors he had been upon the most intimate terms of friendship, whilst fellow-pupils with them under the celebrated Hunter. Imagine a tall, elegantly formed man, moderately robust, with a remarkably pleasing and striking countenance, red, and fresh as a rose, apparently about fifty-eight or sixty years of age, but in reality above seventy, very agile and graceful in all his movements, simply but handsomely attired, with the spirit and vivacity and bearing of a youth, with, in short, no marks of advanced age except a head as white as the driven snow, —and a very just conception may be formed of the appearance of Sir Astley Cooper.

"I had scarcely been seated five minutes before I found myself deeply engaged in discussing all the knotty points of surgery, question following question in rapid succession, and the greatest interest evinced in the various answers returned,—all touching points of practice, either peculiar to America, or in conformity with English or French doctrines, or notions, or, as sometimes happened, adverse to both. Thus employed, an hour glided quickly away, when a servant entered and whispered audibly that the rooms were full of patients, all anxious to obtain his advice. He rose suddenly, apologised for leaving me, and said, "Come and breakfast with me tomorrow precisely at nine, and any morning, if you please, at the same hour, as long as you remain in London, and I will go through with you, day after day, the various preparations in my museum, the most valuable and choice of which are contained in my house." The next morning I was at my post by the appointed time, breakfast was served precisely to the minute, and half an hour afterwards I found myself in his museum listening to a lecture on the structure and functions of the thymus gland, illustrated by some of the most beautiful preparations I ever beheld. At half past ten I took leave, and Sir Astley said at parting, "Come to me, if you can, to-morrow at two o'clock, and I will take you to Guy's Hospital, show you the establishment and its large and splendid collection of preparations,—many of which occurred in my own practice, and are very interesting and unique in their character." Whilst riding, upon that occasion, for miles along the crowded streets of London, and moving so slowly as scarcely to reach our destination for an hour and a half, I was forcibly struck with the fund of anecdote which he was constantly pouring forth, chiefly illustrative of the scenes of his long and eventful life, and relating, in many instances, to ludicrous or remarkable circumstances in the history of some of his professional brethren,—all told in such a way as to convince me that he possessed an innate love for fun, or mischief, so refined, however, by benevolence, as never to wound or tarnish the characters of those whose peculiarities or infirmities he portrayed. I was the more persuaded of this ingredient in his composition afterwards, from hearing, through an old friend of his in the neighbourhood of Yarmouth, where he was born, the following anecdote—

upon the truth of which I thought I could rely. "Sir Astley," said he, "was the son of a clergyman of Yarmouth, where, upon one occasion, the church bells began to ring so vehemently as to alarm the inhabitants, who ran in great numbers to the parsonage to inquire of the minister the cause of such terrific peals from the steeple. 'Oh!' said the reverend gentleman, 'I have no doubt it's all the work of that mischievous wag of mine, Master Astley, and his hopeful playmate, Tom Goodfellow.' Accordingly, upon ascending the steeple, it was found, as predicted, that the boys were busily at work, full swing, pulling and hauling the rope in fine style, and amazingly delighted at the stir and sensation they were creating throughout the town, and the trouble they were giving to the honest citizens."

"During the ride Sir Astley mentioned to me also a striking peculiarity—which showed the power and extent of his memory—by remarking he could take up any of the poets, and from two or three readings repeat for years afterwards whole passages without the slightest omission or mistake, and, in proof of it, immediately recited several pages from Young's Night Thoughts. In conversing with him concerning the destruction of Hunter's papers by Sir Everard Home, he remarked it was true, and an act of great folly on Sir Everard's part, inasmuch as it led to the belief he had never produced an original work, but had stolen every thing from Hunter; whereas, he had strong reason to believe, Sir Everard had only burnt papers which he conceived to be of little or no importance, and that he was not justly chargeable in a single instance with plagiarism. He also spoke of Home as having been an excellent surgeon, full of information, devoted to his profession, but rough in his manners and operations, and so decided in character and independent in views, as to give, upon many occasions, great offence to his patients and brethren.

"Upon reaching Guy's Hospital, I had soon proof of the activity of Sir Astley's frame, and the vigour of his constitution; for he walked with the quickness of a young man, and was so rapid in his movements, as to render it difficult to keep pace with him. I was particularly struck with his demeanour towards the house surgeons, the pupils, the patients, the superannuated nurses, and every living thing about the establishment, his manner being as kind and conciliatory as possible, taking, in several instances, the old men and women aside, and inquiring into their wants; and, upon one occasion, going considerably out of his way, and up a long flight of stairs, expressly to shake hands with an old woman, who had been one of his principal nurses more than forty years, and the only surviving individual, he said, who had been connected with the hospital as long as himself.

"After showing several interesting cases in the wards—one an amputation at the shoulder-joint, performed by Mr. Key, and in a fair way of recovery, the stump being nearly healed, and beautifully formed,—he led the way to the surgical cabinet, and pointed out, with his own hand, each interesting specimen, giving its history and peculiarity, and waiting patiently until I had secured his remarks in my note-book. There, and afterwards at St. Thomas's, I had the opportunity of examining all the preparations referred to in his great work on Hernia, the specimens in which the aorta, the iliacs, the subclavian and carotid arteries had been tied by himself, and the causes of failure or success amply demonstrated. There, also, I saw a specimen in which the subclavian had been tied, successfully, by Mr. Key, in a case where the axillary artery had been torn, in an attempt to restore a long-standing dislocation of the shoulder, and the result of which proved that I myself had been justified in pursuing the same course, under similar circumstances, long before. From the museum (the extent and beauty of which can only be appreciated by those who have examined it closely, as I had frequently afterwards opportunity of doing, and of comparing each specimen with the printed catalogue, in shape of a large volume, prepared by the intelligent Dr. Hodgkin,) Sir Astley kindly took me to the College of Surgeons, where we listened to a most eloquent discourse on the comparative anatomy of the kidney in various animals, by the celebrated Mr. Owen; afterwards introduced me to all the prominent surgeons and physicians present, and concluded by ushering me into the great Hunterian museum, giving me free and unlimited access to every department of it, and there leaving me to revel in the regions of anatomical, surgical, and scientific research to my heart's content. From that period I became a constant visiter at Sir Astley's, and through him formed the acquaintance of Sir Benjamin Brodie, and most of the other distinguished surgeons of London.

"There are many, even in London, who believe Sir Astley to have retired from the profession into the walks of private life. This is a great mistake; for although he has ceased, for some years, to perform the duties of a lecturer, and to attend at Guy's Hospital, except as consulting surgeon, he is still engaged in business and the examination of numerous cases at his own house. It is true he purchased, some years ago, a splendid seat[1] near London, and intended to retire from the profession. For a time he was delighted with his agricultural occupations, but at last found himself so pursued into his retreat by his old patients, or so watched and called upon whenever he ventured to show himself in town, that he was obliged, in spite of himself, to resume his former pursuits, and has ever since attended regularly to the profession. Another circumstance is said to have contributed to drive him from the country. As long, said my informant, as Sir Astley could find a case of disease in his horses, cows, sheep, or pigs, he was delighted, and attended them with all the interest and fidelity he would have shown to a human being, often trepanned the head of some favourite ram or ewe in search of the cause of its disease; but the moment he found his stock in perfect condition, he at once became unhappy, and sighed for his town-house and the wards of Guy's Hospital."—p. 22.

All this is complimentary. We cannot say so much of his description of some others. For example, Dr. Traill,—

"Of Professor Traill I saw little, either at the dinner or before. He is a short, thick, squat-looking man, with bushy, black head, and queer expression, skellies slightly out of one eye, and is very busy, bustling, and important. He had resided at Liverpool, and been transferred thence to Edinburgh, and to the chair of medical jurisprudence, which he fills, it is said, with more or less cleverness."

And our preceptors of the Edinburgh school—Drs. Home and Monro:—

"Dr. Home, the present professor of practice, and successor of the late celebrated Dr. James Gregory, was formerly professor of materia medica! He was never distinguished, however, as a teacher in that branch—being deficient in voice and manner, and had acquired so inveterate a habit of hemming, snuffling, hesitating, and recalling words, as to render his lectures very unpalatable to most of his hearers. Age, I found, had not corrected but increased these defects; and, as he never enjoyed private practice to any extent, and, indeed, seemed to have no turn for it, but depended altogether for his experience on a month or two of clinical attendance annually upon a few patients in the Royal Infirmary, I presume his lectures on the *practice of physic* cannot be very edifying to his pupils. He is, however, a man of fine education, extensive general information, solid professional acquirements, and, I believe, of most amiable feelings and respectable character. Though of too full habit, rather florid, and beyond seventy, he appears to enjoy good health, and may yet live for some years.

"Of Dr. Alexander Monro, tertius, the present professor of anatomy—descended, in a direct line, of a dynasty of professors, the son and grandson of two of the best anatomists, physicians, and teachers, that ever adorned any university, with opportunities unbounded of acquiring information—

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[1] *Gadesbridge*, near Hemel Hemstead, twenty-four miles from London.

from collections of human and comparative anatomy, the accumulation of ages, from extensive libraries transmitted by his ancestors, and from profuse stores of hereditary wealth—what shall we say? Neither more nor less than this—that it was, certainly, most extraordinary that any body of intelligent, respectable men, in the enlightened city of Edinburgh—at a time, too, when the celebrated John Bell was in the zenith of his glory as an anatomist and teacher; when Barclay, a man of intellect, with profound knowledge of the subject, was lecturing to large classes; and when young Gordon, a man of genius and of great promise, was just springing into notice—should make such an appointment, and without recollecting the classic lines,

> 'Genus et Proavos et quæ non fecimus ipsi.
> Vix ea nostra voco.' "—p. 172.

MISCELLANEOUS NOTICES.

Medical School of Maine.—The catalogue of the past session contains the names of 62 students.

Professor Colhoun.—Died, on the 7th of April, Samuel Colhoun, M. D., Professor of Materia Medica in the Pennsylvania College. Professor Colhoun was a zealous teacher of his important branch. He was the editor of one or two useful works,—Gregory's Practice (with Dr. Potter of Baltimore), Prout on Calculus, &c. &c.

On Defective Closure of the Tricuspid Foramen as a frequent cause of Dropsy. By Peyton Blakiston, M. D., one of the Physicians to the General Dispensary, Birmingham.[1]—Various appearances found in the heart of patients affected with the dropsy, referred to that organ, have been generally considered as the real causes of the obstruction preceding the serous infiltration. Dr. Blakiston adduces instances from Bouillaud and Dr. Hope, and from his own observations, in which the aortic and mitral aperture had been very greatly narrowed, probably for a length of time, without producing dropsy till the near approach of death. The increase or diminution of the substance of the walls of the heart, and of the capacity of its cavities, he finds also to have occurred without dropsical symptoms. Agreeing with Dr. Hope in the frequent coincidence of hypertrophy and dilatation of the heart with dropsy, but considering that in such cases, when the proportion between all the cavities is preserved, no cause of obstruction can be recognised, he asks, is it not probable that some obstacle to the circulation, hitherto unobserved, is somehow connected with, if not dependent upon, the dilatation and hypertrophy? The dropsical effusion being, at least in most cases, more immediately dependent upon impediment to the venous circulation, points attention to the right side of the heart; and the dilatation of its cavities generally dilates also the right auri-ventral foramen. The author compares the statement of Hunter, Dr. Adams, and Mr. King, with his own observations respecting the degree to which the tricuspid valves close the foramen in the normal structure, and after some remarks on the dimensions of the heart's cavities, and of the valves, infers, that not only in permanent dilatation of the cavities, but also from shortening of the chordæ tendinæ, and from morbid adhesion of the valves to the walls of the heart, the closure of the tricuspid valves must be so imperfect as to allow regurgitation into the right auricle. As, however, the opinions of authors respecting the sufficiency of evidence in support of regurgitation in such cases are various, Dr. Blakiston proceeds to discuss this question, and inquires whether the pulsation of the jugular veins, nearly synchronous with the systole of the heart, can be admitted to be, according to Dr. Hope's opinion, independent of regurgitation. It is not unfrequently absent, Dr. Blakiston states, in hypertrophy of the right ventricle. He argues, however, that the *force* of pulsation is not the measure of the degree of regurgitation, but of the impulse from the right ventricle. If both ventricles be hypertrophied, the pulsation or shock will be great; if both be attenuated, the pulsation will be weak; while the obstruction to the circulation arising from the relative proportion between the power of the two ventricles is the same in each case, "both the venous current and that of the regurgitation fluid being derived from ventricular constriction." Of all the morbid appearances found in the heart in cases of cardiac dropsy, the deficient closure of the right auri-ventral aperture by the tricuspid valve, arising from different causes, is the only one which appears to be constantly present. The opinion of the author therefore is, that this defect is a frequent and direct cause of cardiac dropsy. "I would not be understood," says Dr. Blakiston, "as claiming that this deduction should be received as an established truth, but as bringing it forward, with the cases and facts on which it is based, in order that its accuracy may be tested by others." In conclusion, those numerous cases upon which Dr. Blakiston states his own opinions were formed, are perspicuously and concisely narrated, and the symptoms during life and the appearances after death, illustrating the subject of the paper, are placed in relief, so as to admit of easy comparison. Among them is detailed a case communicated to the author by Mr. Hodgson, of Birmingham, and a brief classified statement of morbid appearances in thirty-four cases of disease of the heart recorded by Bouillaud.

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[1] Royal Medical and Chirugical Society, Jan. 12, 1841, Sir B. Brodie, Bart., President, in the chair. From the London Medical Gazette for January, 1841, p. 664.

At the conclusion of the paper, Dr. Budd asked if the author believed that the dilatation of the tricuspid orifice was essential to the occurrence of dropsy. On being answered in the negative, he said that the phenomena alluded to by Dr. Blakiston seemed to him to be only illustrations of the general fact; that in all cases of obstruction at any part of the heart, all the parts seated behind it in the course of circulation suffer dilatation, whether their valves were diseased or sufficient to close their respective orifices or not. The same fact was to be observed in many cases of stricture of the urethra, in which dilatation took place in the bladder, ureters, and kidneys, successively, although the valvular structure between the ureters and bladder remained uninjured.

Dr. Blakiston did not deny the influence of disease of one part of the heart in producing changes in another; the object of his paper, and of the cases it contained (but which were not read), was to show that there were many examples in which dropsy had occurred when the only apparent disease of the heart was the dilatation spoken of, while, on the other hand, there were many more of disease and obstruction of other orifices, or their valves, without dropsy having taken place; and thus to render it probable that in many cases this dilatation of the tricuspid orifice was the essential cause of the obstruction of the circulation, by the regurgitation of blood which it permitted in the systole of the right ventricle, and hence of the general dropsy.

Dr. Copland said that the opinion of dilatation of the tricuspid orifice being a cause of dropsy was not novel, but had been generally admitted, not only by M. Bouillaud, but by most of the modern writers on diseases of the heart. He had in his mind the cases of two medical men, in both of whom this was the only or the most remarkable change, and in both of whom the dropsy was general and excessive. As to the obstruction of the circulation producing dropsy, it was manifestly unimportant whether this was the effect of an actual and fixed mechanical cause, or of the regurgitation of blood through a constantly open orifice; in either case the ultimate result must be the same.

Dr. Mayo said that he thought the mode of testing the efficiency of the tricuspid valves described in the paper, and which consisted in the injection of water into the right ventricle, through the pulmonary artery, was not capable of affording any positive result. It was said that the water commonly passed between the valves; and this was what might have been expected. The efficiency of these valves depended on the action of the columnæ carnæ to which they are attached, and this, depending as it does on nervous influence, was lost with life. The tricuspid and mitral were not like the arterial valves, a kind of flood-gates, capable of being forced down by the force of any fluid directed against them, but were guided in all their movements by the contractions of the muscles belonging to them; and when these had ceased to act, it was impossible that the valves should exercise the same influence as before.

Dr. Marshall Hall thought that the attention was too exclusively directed to dropsy as a consequence of disease of the heart. Other effects, not less important, often resulted from it. He had lately had under his care a case in which, in consequence of disease of the heart, with obstruction on the left side, bronchitis had come on, with this remarkable character, that it was entirely without cough, though clearly discoverable by other signs. After a time hemoptysis ensued, and the patient expectorated considerable quantities of blood. Then the liver was found enlarging, and it attained a very considerable size, and then hemorrhage (not from hemorrhoids) occurred repeatedly from the intestines. On examination after death, pulmonary apoplexy was found; the enlargement of the liver was chiefly the result of congestion of the hepatic veins; there was excessive congestion of the veins of the intestines, and from these the hemorrhage had taken place. In cases of this kind the succession of events was plainly traceable, and in the midst of such a complication of symptoms the dropsy was of comparatively small importance. Here the first effect of the obstruction of the left side of the heart was congestion of the lungs, producing bronchitis, with effusion of fluid into the air tubes, and then, as it increased, pulmonary apoplexy; then followed obstruction at the right side of the heart, and on this the lividity of the face and upper part of the body, and the congestion of the liver, producing its enlargement. Next, the obstacle to the passage of blood through the liver was communicated to the blood of the portal veins, and from this resulted the great congestion of the intestines, the hemorrhage from the intestines, and the ascites. He had cases very similar in many respects to this, which were still under his care; and all tending to show that there were many other consequences of diseased heart which required notice as much as that which had in this paper exclusively occupied attention—namely, the dropsy.

Presentation of Plate to Dr. Forbes.[1]—Dr. Forbes is well known to our readers as the translator of Laennec, and the able editor of a quarterly review. At Chichester he has merited the additional fame of a skilful physician, and a good fellow-citizen.

On Tuesday, the 8th of December, as we learn from the Brighton Herald, a farewell dinner was given to Dr. Forbes, at the Dolphin Hotel, Chichester, at which plate to the value of nearly £300 was presented to him. The chair was filled by William Charles Newland, Esq., supported by Admiral Thompson, and about sixty other gentlemen. After the chairman had presented the plate on behalf of himself and the other subscribers, Dr. Forbes thanked him for this mark of their esteem in a very agreeable and manly strain. He neither assumed to himself all the praise implied in so distinguished a gift, nor did he wholly reject it; but was rather inspired by the genial consciousness that so great a chorus of approbation could not be founded in error.

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[1] London Medical Gazette, December 18, 1840.

The plate was presented "in testimony of his character, and in gratitude for his zealous and indefatigable exertions in behalf of the Chichester Infirmary."

NECROLOGY.

Sir Astley Cooper.—This distinguished surgeon, whose fame will exist as long as the annals of British surgery, died on the 12th of February, in the 73d year of his age Sir Astley was one of the most distinguished surgeons that ever lived. Although his intellectual powers were not commanding, they were respectable; and his great opportunities for observation gave him a facility for forming an opinion as to diagnosis and treatment, which have been rarely exceeded.

He amassed a large fortune from the proceeds of his professional labours; originated some important improvements in surgery; and was the author of works of splendour and value.

As a lecturer he was not pre-eminent. His style was faulty, and his language often inelegant; yet he condensed into his lectures a vast amount of important information.

Few men have lived who have deserved so well of their profession or of the public.

[*Advertisement.*]

DROPSY.

The following medicine is highly worthy the attention of practitioners of medicine. It has proved very successful in the hands of the faculty in this city.

GEO. W. CARPENTER'S

COMPOUND

FLUID EXTRACT OF WHAHOO,

For the cure of Dropsical Affections, Anasarca, Hydrothorax and Ascites.

Geo. W. Carpenter, in a late tour through the western part of the United States, became acquainted with a valuable vegetable remedial agent, which is of great interest to the medical profession, and of immense importance to the community. The medicine is prepared from the Bark of the Whahoo, an indigenous shrub, growing to the height of 8 or 10 feet, in moist and shady places, particularly in shady woods, in various parts of the States of Indiana and Illinois. As the subscriber visited the country in the winter season, he is not at present able to give a description of its botanical character and habitudes so as to identify clearly the species; it resembles somewhat the Euonymus Carolinensis.

It was first employed by a regular physician who had been a long time a prisoner with the Indians. They gave it the name of Whahoo, and used it for the cure of general dropsies and some diseases of the lungs. G. W. Carpenter, aware of the great value of this medicine, and knowing the great importance of having it properly prepared, so as to extract all its medicinal properties, and to exhibit it in a concentrated state of uniform strength, has made a number of chemical and pharmaceutical experiments, to ascertain its proper menstruum for solution, and its chemical affinities, and, in accordance, has prepared a fluid extract, which contains all the medical properties of the Whahoo Bark in a concentrated state, &c., which he offers to the faculty as a valuable medicine for the cure of all dropsical affections.

A very distinguished physician in Indiana writes me, that in 20 years' practice he has never known it fail in curing Anasarca, unless there was some visceral disease that destroyed the patient without the aid of dropsy, and that he has cured a great many cases of Hydrothorax and Ascites with it. He also states that he has seldom failed to remove the ague cake or enlargement of the spleen, by persisting in its use for 3 or 4 months and uses it as a general alterative more than he does calomel, and finds that it operates as such much better, and with more certainty and safety to the patient.

The following letter was addressed to me by a very distinguished physician of Philadelphia, who has an extensive practice and great experience in his profession, and whose remarks are entitled to the highest degree of credit and importance.

"*To Geo. W. Carpenter, Esq.*

"Sir,—A ready compliance with your request to be informed of the opinion which the trials of the 'Whahoo Bark' in the treatment of dropsical affections, has enabled me to form, is due to you, who introduced the article to my notice. I shall perhaps satisfactorily answer your desire for information, by the transmission of an extract from my notes, contributory to a paper, upon the history and medical adaptations of this native curative agent, in which I propose to lay before the profession its claims to medical attention.

"It is hydragogue, cathartic and diuretic in its operation. Its primary effects are prompt and decided, and are distinguished from the effects of other articles of equal force and power, vegetable or chemical, belonging to this class of medicines, in being unassociated with the debility and prostration of system that too frequently attend their use.—Its influence upon the absorbent system is powerful, and transcends that exerted by any article in its integral character with which I am acquainted.

"Its value is enhanced by the assurance its use has afforded me, that it is free from the uncertainty of dose arising from the variance of strength to which the *elaterium* of commerce is subjected, and which renders it so equivocal in its action, that it is only employed as a dernier resource by prudent practitioners.

"I have seen as many as 30 copious watery dejections produced by the use of the 'Whahoo Bark,' daily for several days—and the measured quantity of two gallons of urinary discharge within the space of 12 hours, without inducing any perceptible debility or reduction of the force of the circulation. In two very distressing and violent cases of Dropsical disease, the one of Ascites accompanied with Hydrothorax—the other of general dropsy; its use was speedily followed by a removal of the hydropic effusion. In the former instance, a lady between 30 and 40 years of age, the manifestations of the disease had become so distressing and painful, in defiance of all the remedial treatment which had been pursued, that every expectation of relief from the immediate sufferings, except through the aid of an operation, had been abandoned. She had laboured under complicated symptoms of disease for many years, but is now restored to perfect health.

"In either case the happy influence of the remedy was made evident upon the administration of 3 or 4 doses. It was used in the form of a liquid Extract, prepared by you, in doses of one to two teaspoonfuls every two hours. After using it a day or two, its effects became very manifest in its action upon the bowels. The dose of two teaspoonfuls every two hours has generally proved amply large enough to secure all its beneficial effects.

"I am at present employing it in some cases of chronic disease, to the symptoms of which its virtues appear to be adapted, and with a promise of result, which previous experience of the curative quality of the article warrants. Its alterative power is very manifest, and will, I believe, when fully developed, entitle it to a distinguished position among the more useful and powerful remedial agents of the materia medica.

"I cannot, sir, suffer this hasty communication to be closed, without an acknowledgment of the debt which curative medicine owes to you, for the indefatigable exertions you have ever made to improve the pharmacology of our country; and I would assure you, that should this medicine, upon more extensive use and general adaptation, redeem the promises of usefulness it now holds forth, that debt will be greatly increased by your agency in bringing it into notice.

Most respectfully, I am yours, &c.

F. A. VANDYKE."

No. 26 Montgomery Square, Race St., between
11th and 12th St., South side, Philadelphia.

The dose of the Compound fluid Extract of Whahoo, is one to two teaspoonfuls every two hours for adults, which may be gradually increased or diminished if circumstances require. The doses for children, in proportion to their ages, beginning with a small dose and gradually increasing it if necessary. It may be mixed with a little sweetened water, if desirable.

This article is prepared only by the subscriber, and each bottle will have the written signature of Geo. W. Carpenter, on a label immediately on the bottle; and he would beg leave to caution the public to a careful observance of this, or they may get a spurious medicine; for as soon as he prepares anything new, he is counterfeited, or imitations attempted to be foisted off by some unprincipled members of the trade, who copy his directions and advertisement, and put up articles so as to resemble his as near as may be externally, but which are totally or essentially different in the composition or mode of preparation.

GEO. W. CARPENTER,
301 *Market St. Philadelphia.*

THE

ERICAN MEDICAL

INTELLIGENCER.

A CONCENTRATED RECORD OF MEDICAL SCIENCE AND LITERATURE.

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THE END.

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For the American Medical Intelligencer.

Art. I.—TREATMENT OF RHEUMATISM BY INOCULATION WITH MORPHIA.

BY Q. GIBBON, M. D.

Salem, N. J., May 19th, 1841.

To Professor Dunglison.

Dear Sir,—A wish to present to the profession what I deem a useful fact, has induced me, though at the risk of intruding upon the time of one with whom I have not the pleasure of a personal acquaintance, to offer for your consideration the following remarks:—

Having seen in your work upon "New Remedies," published some time since in the "Library," an article upon the beneficial effects derived from inoculation with morphia in the treatment of local diseases, I determined to make a trial of the plan in local rheumatism, an affection which I have frequently found great difficulty in managing. I was not long afterward called to treat an obstinate rheumatic affection of the knee-joint, which had resisted the usual general and local means. One quarter of a grain of the sulphate of morphia was inserted, by means of punctures, in the skin over the affected part, twice a day for two days, with the most marked and satisfactory results. The patient, who for two weeks previous had suffered extreme pain upon the slightest motion of the limb, was, at the expiration of this period, able to walk with slight inconvenience, and upon the third day, threw aside the crutch with which he had before hobbled across his room. Friction with stramonium ointment, two or three times repeated during the fourth day, removed all remaining disease in the affected part.

The next case was a rheumatism of the wrist, in which no previous treatment had been practised. In this case, which was recent, two applications of the morphia, upon two succeeding days, so effectually removed the pain and tenderness, as to allow of the free use of the hand on the third day.

The third trial was made upon an obstinate rheumatism of the knee-joint, remaining after the subsidence of general rheumatism. The patient, a robust boy of sixteen, after having been rendered motionless for several days by a severe attack of inflammatory rheumatism of the whole system, recovered under the free use of tart. antim. opium, and colchicum, with the exception of the knee in question, which remained exquisitely painful, and tender upon pressure in one spot of about an inch in diameter upon its inner side. The insertion of a quarter of a grain of morphia, produced in a few hours a decided impression upon the pain, and by the second day, the symptoms were so far mitigated as to permit free motion in the part. This patient recovered rapidly without any farther medication.

A fourth case, which had resisted acupuncturation, assisted by the free use of the stramonium ointment, yielded upon the fourth day from the first application of the morphia, the patient expressing much satisfaction at the effects of the remedy.

Since treating the above cases, I have had an opportunity of testing the good effects of morphia in several other instances, and with results which induce me to entertain a very favourable opinion of its remedial powers. Judging from the limited experience which I have as yet had of its application, I should think it best adapted to the recent and active grades of the disease. I think it proper, however, to state that I have met with one case of rheumatism in which, though to all appearance a favourable one for its successful exhibition, the morphia failed in producing its beneficial effects.

For the American Medical Intelligencer.

Art. II.—LUSUS NATURÆ.

To Dr. Robley Dunglison.

Dear Sir,—I send you for publication, should you deem it worthy of an insertion in your valuable medical journal, a hastily drawn up description of a remarkable Lusus Naturæ, which occurred in this county, in Nov. 1840.

Yours, &c.,
Wm. S. Thruston, M. D.

Mathew's Court House, Va., April 20th, 1841.

Medical and physiological works abound with numerous cases of very novel and singular developments; with instances of monstrosities assuming every form and shape, both in the inferior and superior orders of creation. Cases of excess, and deficiency of parts, are found to be recorded in every physiological work; but I doubt exceedingly whether there is so remarkable and novel a case on record in any of the American or European publications, similar, in all its bearings, to the one which is now presented to the medical profession;—one so remarkable in its conformation, or singular in its developments; or one so well calculated to excite the interest and curiosity, to elicit the speculations and opinions of the medical and physiological inquirer after truth, and to fill with astonishment and wonder the superstitious and uninformed spectator, as this admirable specimen of one of nature's freaks.

A free negro woman, in the county of Mathews, Va., was delivered on the night of the 29th of November, 1840, of three children. One of them, a remarkably fine child, is still alive, doing well, and apparently in perfect health and perfect in its conformation. The other two are as large as ordinary twin children generally are, and present the following singular appearance. There are two heads and necks, perfect in their organisation; the head of one rather larger than the other, and somewhat deformed or injured from improper delivery; four upper and two lower extremities, two chests, one abdomen or body, one umbilical cord, and one male organ of generation. There is to all appearance a perfect conformation of parts from the umbilicus to the apex, except about the chest, which is a little remarkable in its formation. They are united sidewise, from the clavicle to the umbilicus; the right chest of one, and the left of the other, appear deficient, or rather they seem to have grown into each other; consequently the remaining portions project out somewhat unnaturally. The right and left arms of each are thrown over each other's shoulders and back, presenting the appearance as if they were embracing. The other two arms hang in their natural position.

From the umbilicus downwards, they are one; and to all appearance there is a perfect development of parts, except the organ of defecation, which is somewhat imperfect, or rather nearer the scrotum than natural. It is thought that they were alive just before birth; they certainly possessed vitality during some portion of their uterine existence, every part being well proportioned in size, &c., and evidently nine months children. There being two chests, it is reasonable to suppose that there must be two hearts, and two sets of pulmonary organs, and one set of digestive apparatus. It seems to me, that so perfect a development of external parts could not have taken place without a corresponding development of the internal organs; or that two distinct children, as they appear to be, from the umbilicus to the head, could not be supported by one circulating system, and one set of pulmonary organs. There being one abdomen, it is not, I presume, dealing too much in speculation, to suppose there must be only one set of intestines or digestive apparatus; certainly if there be two, they must have, or rather open into, one common duct, the rectum. This, however, is mere speculation, as I have submitted them to no anatomical examination, designing at some future day to present them to some medical museum. I have them at present in a perfect state of preservation in alcohol. Could this very singular lusus naturæ have been delivered alive, and I doubt not its practicability, had the case been in the hands of a skilful accoucheur, and lived to maturity, we should have had presented to us the singular anomaly of two beings in one, and supported upon only two lower extremities. The celebrated Siamese twins, who have traversed every portion of the civilised globe, gaining notoriety wherever they have exhibited themselves, attracting the attention of the curious and enlightened, filling with astonishment and wonder the illiterate, and eliciting the speculations and opinions of the medical and physiological members of the profession, will not, I am sure, bear comparison with this remarkable *lusus naturæ.*

The writer of this, together with many members of the medical profession who have had the pleasure of visiting and seeing the numerous cases of monstrosities, both in the medical and other museums in Philadelphia, as also of seeing the noted Siamese twins, fully concur in the opinion that this is a far greater curiosity, and greatly surpasses any specimen they have ever seen or read of, in its singular development. Already different views and opinions have been advanced by the medical gentlemen who have seen it, as to its internal structure and physiological relations. It is indeed amusing to observe the countenances, and to hear the singular expressions and opinions of the numerous uninformed persons who have seen it, as to its uterine development and fœtal existence, and finally its delivery; and surely this is not at all remarkable, for whether it may be attributed to the influence of the maternal imagination on the fœtus in utero, or to accidental changes experienced by the fœtus at some period of uterine existence, or to a primitive defect in the germ, are questions well calculated to puzzle the most profound physiologist to solve, as well as to open a wide field upon which the imaginary and speculative members of the profession may muse with pleasure and interest. The celebrated Siamese twins have already elicited much speculation, and have drawn forth the different views and opinions of most of the distinguished members of the medical profession, both of this country and Europe, in relation to their internal organisation, &c. Whether there exists so great sympathy between their nervous and circulating system, in fact, among all their important organic developments, as to endanger their lives, were the ligamentous membrane that unites them severed, has been a question long mooted by medical men. The writer of this, as before observed, has had the pleasure of seeing this noted curiosity, but, to speak candidly, saw nothing about them calculated to excite very much his curiosity and astonishment, except the fact of their being united by a ligamentous substance, and the remarkable similarity in their countenances and physical conformation, &c. The most singular fact is, their having been delivered alive, and survived to manhood in a country where the medical, and especially the obstetrical, art must have been, and still is, from the nature of things, in a very rude and imperfect condition; but dame Nature does, and would in a majority of instances, accomplish what the eager physician, either to afford speedily relief to his suffering patient, or to enhance his own reputation, too frequently takes out of her hands. How much more astonishing and remarkable, then, is this little curiosity, than the noted Siamese twins? How many more views and opinions would have been drawn forth from the medical profession, could this rare case of lusus naturæ have been delivered alive, and grown up to manhood?

I have thus, Mr. Editor, given you, and through your valuable periodical to the world, as correct a description of this curiosity as I am capable of doing, and which I deemed a duty I owed to the medical profession. I have endeavoured to guard against giving it any false colouring, or rendering it more mysterious and wonderful than it really is; as it presents itself to me, thus I give it to you. I have avoided as much as possible running into any theoretical or speculative opinions of my own, as to its internal physiological relations. I leave this to you, and to the other distinguished members of the medical faculty, hoping that you will, should you deem this worthy of insertion in your journal, give us your views at length, and oblige

Your obedient servant and pupil,
Wm. L. Thruston, M. D.

Art. III.—ON THE ORDER OF SUCCESSION IN WHICH THE VITAL ACTIONS ARE ARRESTED IN ASPHYXIA.[1]

BY JOHN REID, M. D., F. R. C. P. E.

Lecturer on the Institutes of Medicine, President of the Anatomical Society, &c.

A knowledge of the order of succession in which the vital actions of the body are brought to a stand in asphyxia, is not only useful in elucidating the exact nature of the function of respiration, and in pointing out rules for our guidance in the direction of certain remedial agents, but it may also be brought to bear in an important manner upon the investigations into the general laws of physiology. The inquiry is one, however, of unusual difficulty, from the intimate manner in which the respiration is associated in the higher animals with the other vital functions, and the rapidity and energy of the actions and reactions of these upon each other. In conducting such experiments, it is not only necessary to watch closely every phenomenon which presents itself, however fleeting it may be, but all the varied concomitant circumstances must also be carefully analysed, and, if possible, insulated, with the view of ascertaining how far they might affect the results. Our progress in such investigations must, therefore, always necessarily be slow, frequently vacillating and uncertain. These difficulties were found so perplexing, that I had several times nearly given up the present inquiry in despair; and it was not without much labour, and repeated failures, that I arrived at what I considered satisfactory results.

The two points in the physiology of asphyxia which have of late years principally attracted attention are, the nature of the impediment to the circulation of the blood through the lungs; and the cause of the arrestment of the sensorial functions. A correct knowledge of the manner in which the vital actions are arrested in asphyxia, is supposed to be included in the true explanations of these two facts. The first of these, viz. the impediment to

[1] Ed. Med. and Surg. Journal, April, 1841, p. 437.

the free passage of the blood through the vessels of the lungs, and its consequent stagnation in the right side of the heart, and the large vessels leading to that organ, have been attributed to three causes—the cessation of the mechanical movements of the chest; the effects of the venous blood upon the contractility of the heart; and the difficulty of transmitting the venous blood through the capillaries of the lungs, when the chemical changes which go on there between the blood and the atmospheric air have ceased. The opinion, that the blood in death from asphyxia chiefly accumulates in the right side of the heart and the large vessels leading to it, in consequence of the stoppage of the mechanical movements of the chest, was advocated by Haller.[1] He maintained, that when the lungs were distended with air, as in inspiration, that the blood flowed readily and abundantly through the pulmonary vessels; but, on the other hand, when these organs had collapsed, as in expiration, the pulmonary bloodvessels were so compressed, and their angles rendered so acute, that they became in a great measure impermeable to the blood sent from the right side of the heart.[2] Goodwyn[3] argued, in opposion to the mathematical calculations and reasonings adduced by Haller, that, when the lungs are diminished in their bulk, and the acuteness of the angles of the bloodvessels changed only to the extent which occurs during expiration, the flow of blood through them would not be materially obstructed. He also drew additional arguments in favour of this opinion, from the continuance of the circulation through the lungs, when an amount of fluid was present in the chest sufficient to compress the lung to the extent which occurs in expiration, whether this fluid had been effused in the human species from disease, or induced by artificial means in the lower animals.[4] Goodwyn maintained that the cessation of the circulation in asphyxia was chiefly dependent upon the venous blood failing to excite the contractions of the left side of the heart. "When respiration," he says, "is obstructed, the florid colour of the blood is gradually diminished, and the contractions of the left auricle and ventricle soon cease. The cessation of contraction arises from a defect of a stimulating quantity in the blood itself."[5] The views of Goodwyn were attacked a few years after their promulgation by Coleman[6] and Kite.[7] Both these authors adduced the results of various experiments, to prove that the left side of the heart can contract vigorously upon venous blood;[8] and they also both maintained that they had proved experimentally, that, when the lungs are kept mechanically distended during the process of asphyxia, that the quantity of blood found in the right side after death is not found to preponderate much, if at all, over that contained in the left side.[9] Bichat also furnished abundant evidence to prove that the left side of the heart can contract vigorously upon venous blood. In numerous experiments, he found that when an animal is asphyxiated, black blood at first traverses the lungs to reach the left side of the heart, and may for a short time be projected from a cut artery, with very considerable force; and he further satisfied himself, that the contractions of the heart could be renewed even after they had become quiescent in different kinds of violent deaths, by injecting venous blood along one of the pulmonary veins towards the left side of the heart.[10] Bichat especially dwelt upon the importance of discriminating between the effects of asphyxia upon the functions of animal and those of organic life; of ascertaining the priority of the suspension of those two great sets of functions, and the influence which they exerted upon each other. He maintained that the heart's action does not cease because the dark blood transmitted to the left side of the heart cannot excite it to contract, but because the dark blood, by being circulated through the coronary arteries in the muscular tissue of the heart, arrests its contractility. This effect of the dark blood upon the contractility of the heart was, however, regarded by Bichat as only an isolated phenomenon in asphyxia; for he believed that the vitality of all the tissues of the body was equally affected by the circulation of this dark blood, and that the functions of the brain, or the animal functions, were always arrested before those of organic life.[1] He maintained that the accumulation of the blood in the right side of the heart did not depend upon any mechanical obstruction in the bloodvessels of the lungs, but from various other causes, among which he enumerates the obstacles opposed to the force of the already enfeebled right side of the heart, by the effects of the circulation of dark blood in the bronchial arteries, and the cessation of the excitation of the lungs by the atmospheric air,[2] aided by the circumstance that the systemic ventricle can more easily overcome the resistance presented by the capillaries of the body generally, than the veins and pulmonic ventricle can overcome that arising from the capillaries of the lungs. Bichat appears to have entertained doubts whether the circulation of the venous blood through the capillaries of the systemic circulation arrested the vitality of the tissues simply by default of excitation, or by exerting some deleterious influence upon it; for, while discussing its effects upon the brain, he thus expresses himself—"Je ne puis dire si c'est négativement ou positivement que s'exerce son influence: tout ce que je sais, c'est que les fonctions du cerveau sont suspendues par elle." Although Bichat failed in giving the correct explanation of the manner in which the vital actions are arrested in asphyxia, yet there can be no doubt that to him we are indebted for having pointed out the true path by which this knowledge was to be attained. Another important advance was made in the elucidation of asphyxia by the experiments of Dr. David Williams, of Liverpool, and Dr. J. P. Kay. Dr. Williams,[3] in experimenting on this subject, found "that when the chest is laid open immediately after the trachea has been tied during the acme of inspiration, the pulmonary veins soon become empty, while the pulmonary artery continues full." From these experiments, he inferred that, in asphyxia, the blood is obstructed in its passage through the lungs, while its circulation through the other tissues of the body continues; and that the obstruction in the lungs "arises from a deprivation of pure atmospheric air." Dr. Kay, from his numerous experiments,[4] has also arrived at the conclusion, that "the circulation is arrested after respiration ceases; because, from the exclusion of oxygen, and the consequent non-arterialisation of the blood, the minute pulmonary vessels, which usually convey arterial blood, are then incapable of conveying venous blood, which therefore stagnates in the lungs."[5] Dr. Kay believes that this stagnation of blood in the right side of the heart and pulmonary artery, occurs in consequence of venous blood being incapable of exciting the arterial capillary bloodvessels of the lungs. The experiments of Dr. W. F. Edwards[6] upon frogs, and those of Dr. Kay upon warm-blooded animals, have very distinctly proved that the circulation of venous blood in the muscular tissue not only does not exert any deleterious influence upon its contractility, but that this property continues to manifest itself considerably longer when venous blood is allowed to circulate through the vessels of that tissue, than when the circulation of the blood has been entirely arrested.

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[1] Elementa Physiologiæ, Tom. iii. Lib. viii. Sect. iv.

[2] Opus cit. Tome iii. p. 246. 1776.

[3] The Connection of Life with Respiration. London, 1788.

[4] Opus cit. p. 40–47.

[5] Opus cit. p. 85.

[6] A Dissertation on Suspended Respiration, 1791.

[7] Essays and Observations, &c. on the Submersion of Animals, &c. 1795.

[8] Coleman, Opus cit. p. 118; and Kite, Opus cit. p. 26, 42, and 44.

[9] Coleman, p. 107 to 116; Kite, "From these experiments, it is evident that a small quantity of blood can pass through the lungs when they are in a state of perfect expiration."—P. 58.

[10] Sur La Vie et La Mort, article sixième, § ii.

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[1] Car, d'après ce que nous dirons, l'affaiblissement qu' éprouve alors le cœur n'est qu'un symptôme particulier de cette maladie dans laquelle tous les autres organes sont le siége d'une semblable débilité.

[2] "Le défaut de son excitation par l'air vital."

[3] On the Cause and the Effects of an Obstruction of the Blood in the Lungs. Edinburgh Medical and Surgical Journal, Vol. xix. p. 524.

[4] The Physiology, Pathology, and Treatment of Asphyxia, 1834.

[5] Opus cit. p. 161.

[6] De L'Influence des Agens Physiques sur la Vie, p. 9, 1824.

Though the experiments of Dr. Williams and Kay have demonstrated that in asphyxia the circulation is first brought to a stand by some impediment to its free passage through the lungs, yet we believe that few will feel satisfied, after a careful analysis of them, that they enable us to determine whether this impediment results from the cessation of the respiratory movements of the chest, or from the arrestment of the usual chemical changes between the blood and the atmospheric air—a question of considerable importance in general physiology. When we remember the great influence exerted by the respiratory muscular movements upon the force with which the blood is transmitted along its vessels,—a fact first well illustrated by Hales,[1] afterwards by Bichat[2] and latterly in a more definite manner by Magendie[3] and by Poiseuille,[4]—a degree of uncertainty must always exist in interpreting phenomena observed in experiments upon asphyxia, in which means have not been taken to obtain the extent and value of this influence.

Such a precaution is the more necessary, since it has been ascertained that dark blood passes at first in the usual quantity through the lungs, and is sent with great force and in a full stream from a cut artery; that it is not until the respiratory movements have been considerably impaired that it begins to stagnate in the lungs; and that after death, considerable quantities of dark blood are frequently obtained from the left side of the heart. Coleman found that the relative quantity of blood in the two sides of the heart, after drowning, varied considerably; "sometimes being as 7 to 4, at other times as 5 to 2, or as 12 to 7. So that, as a medium, the proportions of the right one to the left are about 3¼ to 1¾. After hanging, the medium was found to be as 2⅞ to 1½.[5]

Professor Alison, with the view of supplying this defect in the theory of asphyxia, performed several times the following experiments.[6] A rabbit was confined in nitrogen gas until its respiratory movements had become laboured, and insensibility was approaching. The animal was then withdrawn as rapidly as possible from the glass jar in which it had been confined, and the brain was suddenly crushed by a blow with a hammer, and the chest was immediately laid open. The quantity of blood found in the right side of the heart preponderated considerably over that in the left, and, as the respiratory movements had not been interrupted until the animal had been deprived of life, and the circulation in a great measure suspended, these experiments are obviously greatly in favour of the opinion, that the accumulation of the blood in and around the right side of the heart is dependent upon the cessation of the chemical changes between the blood and atmospheric air in the lungs, and not upon the arrestment of the mechanical movements of the chest.

It appeared to me that very conclusive evidence might be obtained on this question by a series of experiments performed in the following manner. A tube with a stop-cock was fixed into an opening in the trachea, and one of Poiseuille's hemadynamometers was introduced into the femoral artery, for the purpose of obtaining definite information upon the force with which the blood was transmitted along the arterial system. The stop-cock of the tube in the trachea was then shut, and when the respiratory process had been suspended sufficiently long to cause a decided fall in the column of mercury supported by the blood sent along the femoral artery, a large bladder, full of pure nitrogen with a brass nozzle provided with a stop-cock, was fixed in the tube in the trachea, which it fitted accurately, and both stop-cocks opened. After the effects of the respiration of the nitrogen gas had been ascertained, a bladder of the same size as the other, similarly provided with a nozzle, and full of atmospheric air, was then substituted for the bladder containing the nitrogen, and the results compared. The difference between the effects of the respiration of the nitrogen gas and the atmospheric air was most marked, and of such a nature as could not be mistaken; for while the mercury continued to fall in the instrument during the respiration of the nitrogen gas, it rose very rapidly immediately after the atmospheric air had entered the lungs, and acted upon the blood. In this experiment, the same mechanical movements of the chest which failed to renew the free circulation of the blood through the lungs when nitrogen gas was inspired, rapidly effected that object when atmospheric air was permitted to enter the lungs, even when tried on the same animal, and subsequent to the failure of the nitrogen, and, consequently, at a more advanced stage of the process of asphyxia. This experiment was repeated several times, and when the requisite care was taken to procure and employ pure nitrogen, invariably with the same results.[1]

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[1] Statical Essays, Vol. ii, p. 1 to 33, 1740.

[2] Sur la Vie et la Mort, article huitième, § ii.

[3] Journal de Physiologie, Tom. i. Leçons sur les Phénomènes Physiques de la Vie.

[4] Journal de Physiologie, Tom. viii. p. 272.

[5] Opus cit. p. 18.

[6] Edinburgh Medical and Surgical Journal, Vol. xlv, p. 103.

Before directing the attention of the reader to a table containing the results of one these experiments, it will be necessary to take notice of a very unexpected phenomenon which presented itself, and for a considerable time completely embarrassed and perplexed me. Before commencing these experiments, I conceived from *à priori* reasoning, that when the blood had become dark in the arteries, and the animal functions had been suspended, that the mercury would begin to fall gradually and steadily in the hemadynamometer, and that there would in a short time be a marked depression in the level of the mercury. The mercury, however, actually stood higher in the instrument, and the large arteries became more distended and tense for about two minutes after the animal had become insensible, when the blood in an exposed and unobstructed artery was equally dark as that in the accompanying vein, and when the attempts at respiration were few and imperfect, than before the stop-cock in the trachea was shut, and when the animal was breathing atmospheric air freely. This was so unlooked for, at first sight was so inexplicable, and so much at variance with my preconceived notions on the subject, that I was strongly inclined to believe that there must be some source of fallacy; but after repeating the experiment more than twenty times, and invariably with the same results, I was at last compelled to admit its accuracy. I then began to surmise that this arose from an impediment to the passage of the venous blood through the capillaries of the systemic circulation, similar to that pointed out in the capillaries of the pulmonic circulation, by which the force of the left ventricle was principally concentrated in the arterial system, and on placing a hemadynamometer in the vein of the opposite limb, and comparing its indications with the instrument fixed in the artery, this supposition, as may be seen from the annexed tabular view of the results of one of these experiments, appeared to be verified. This fact may explain how a quantity of blood is retained in the left side of the heart in asphyxia. It was also ascertained, that though the fall of the mercury in the instrument after the animal was nearly asphyxiated took place very gradually at first, it at last fell very rapidly. Suppose, for example, that the mercury in the tube ranged between 4½ and 5 inches in height before the entrance of fresh air into the lungs was prevented, it rose above this when the animal had ceased to struggle; it afterwards fell very gradually to between 3 and 4 inches; and when it had fallen to between 2 and 3 inches, it frequently sunk very rapidly to the original level. When atmospheric air was allowed to enter the lungs after the mercury had sunk low in the instrument, no sooner had the air acted upon the blood in the lungs, than the mercury instantly sprung up several inches, and when the blood had become more perfectly arterialised, it again stood lower, and the range was more limited. The respirations were necessarily much diminished in frequency, also slow and heaving after the stop-cock was opened in an advanced period of the process of asphyxia, and it was remarked, that during each respiratory movement the contractions of the heart were not only performed with increased strength, but likewise with greatly increased frequency. When the animal was breathing freely through the tube in the trachea, was quiescent, and when the blood was fully arterialised, the range of level of the mercury in the tube seldom exceeded half an inch, sometimes not so much. When the stop-cock was shut, no change took place in the range of the mercury during the first half minute: generally before the end of the first minute the animal had begun to struggle, and then the range greatly increased,—rising during each attempt at expiration, and during the struggling of the animal, falling during each attempt at expiration and during quiescence. In some of the experiments, the range of the mercury during these different conditions amounted to about nine inches, and in one experiment to ten inches,—making a most material disproportion in the extent of the pressure upon the inner surface of the arterial system of vessels.

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[1] In the experiments first performed, the mercury rose in the instrument, but the nitrogen was mixed with a quantity of atmospheric air, as was proved by the blood becoming partially arterialised in an exposed artery.

TABLE I.—Showing the changes in inches of the height and range of the mercurial column in the vertical limb of the hemadynamometer in one of the first class of experiments, when the instrument was fixed in the artery only; the intervals of time at which each change occurred, reckoning in half minutes from the commencement of the operation; with remarks on the state of the animal at these respective changes. The depth and height of the mercury marked at the end of each half minute indicated, as near as possible, the extent of the range in the level of the column during that interval of time.

Intervals of Time.	Height of Mercury in the tube attached to the Artery.		Remarks on the state of the Animal.
Minutes.	Depth.	Height.	
		1.0	When the hemadynamometer was adjusted to artery, the mercury stood at this height in the vertical tube of the instrument.
		5.5	At the instant the stop-cock was turned, it was 5.5.
½	4.0	4.5	Stop-cock on trachea shut. Dog quiet.
1	3.0	7.0	Do. The artery becoming a little dark.
1½	3.0	9.0	Do. The artery black. Animal struggling.
2	2.0	12.0	Do. do. Animal struggling violently.
2½	4.0	9.0	Do. do. Animal quiet.
4½	4.0	8.0	Do. do. do.
5	4.0	8.0	Stop-cock on trachea opened, and a bladder filled with nitrogen gas applied.
6	3.0	6.0	Do. do.
		11	Bladder of nitrogen removed, and one filled with atmospheric air applied.
7½	5.0	11.0	Bladder removed. Natural respiration allowed.
8½	**5.0**	**6**	**Bladder removed. Animal quiet.**

TABLE II.—Showing the same conditions in regard to the second class of experiments, in which hemadynamometers were applied to both the artery and vein at the same time.

Intervals of Time.	Height of Mercury in the tube attached To the Artery.		To the Vein.		Remarks on the state of the Animal.
Minutes.	Depth.	Height.	Depth.	Height.	
		0.5		0.0	When the hemadynamometers were adjusted to the vessels, the mercury stood at these heights in the two instruments respectively.
		6.0	5.0	6.0	
½	4.0	5.0		4.0	Respiration natural. Dog quiet.
2½	3.5	5.0		4.0	Stop-cock on trachea shut.
3½	3.0	6.0		3.5	Do.
4	2.0	11.0		12.	Do. Animal struggling. The mercury thrown over the top of venous tube, which was 12 inches high.
4½	5.5	10.0		12.	Mercury stood at top of venous tube.
5½	5.5	9.0		8.0	Do.
6½	5.0	11.0		3.5	Do.
7½	5.0	8.		2.5	Do.
8½	2.5			2.1	Do.

In some of the other experiments, the difference between the height of mercury in the two instruments, when the blood became venous, was not so marked as in this.

In performing these experiments, I derived much valuable assistance from several gentlemen, but more especially from Mr. James Spence aud Mr. K. T. Kemp.

We now proceed to examine the explanations which have been given by physiologists of the cause of the arrestment of the sensorial functions in asphyxia. We have already stated that Bichat maintained that the suspension of the sensorial functions was caused by the circulation of venous blood in the arteries of the brain; while Dr. Kay believes that he has proved that it is principally dependent upon a diminished supply of that fluid being sent along the systemic arteries, in consequence of the impediment to the circulation through the lungs, and not because the blood sent to the brain is venous—an opinion somewhat similar to that maintained by John Hunter.[1] The experiments of Dr. Kay, in which he injected, "gradually and gently,"[2] four drams of venous blood into one of the four arteries conveying arterial blood to the brain, through a very small syringe, "having a beak with a capillary bore,"[3] though undoubtedly sufficient to prove the highly unsatisfactory nature of the evidence adduced by Bichat in support of his position, that the sensorial functions are arrested by the circulation of venous blood in the arteries of the brain, cannot, however, be adduced as satisfactory evidence against the doctrine itself. Such an experiment may prove that the transmission of a certain quantity of venous blood along *one* carotid artery is not sufficient to produce cerebral derangement; but it cannot enable us to determine what would be the effect of the passage of venous blood along *all the four* arteries of the brain. We have very frequently watched an exposed carotid artery in an animal during the process of asphyxia, and have observed that the blood flowing along it gradually becomes darker and darker; and we were satisfied that considerably more venous blood than in the experiments now referred to, is circulated through the brain for a short time before the animal is seized with convulsions and insensibility. It is evident, then, that, if the suspension of the sensorial functions is caused by the presence of dark blood in the arteries of the brain, it must be circulated in greater quantities, and for a longer time than occurred in these experiments of Bichat and Dr. Kay. Before we can proceed further in this inquiry, it will be necessary that we examine the variations in the quantity and force with which the blood is sent along the arteries, and returned by the veins during the process of asphyxia. We have already stated that the arterial pressure, as ascertained by the hemadynamometer, is very little altered during the first half minute after the entrance of fresh air into the lungs has been suspended; that about the end of the first, or the beginning of the second minute, when the animal commences to struggle, the pressure is greatly increased; and that, generally, for about two minutes after the animal had become insensible, and had consequently ceased to struggle, the pressure was even greater than before the commencement of the operation. It was also repeatedly ascertained, that the venous pressure, as indicated by the hemadynamometer introduced into the jugular and femoral veins, was equally great for a short time after the animal had become insensible, as before the respiration had been suspended. When an artery is cut across, immediately after insensibility has supervened, the blood springs from it in a full stream, and with a force equal to what would occur if arterial blood was circulating in the vessels. The insensibility in asphyxia cannot, therefore, depend upon any diminution in the force with which the blood is sent along the arteries of the brain, nor upon any diminution in the vascular pressure upon that organ. As, however, the frequency of the pulsations in the arteries becomes remarkably diminished before the circulation has been fairly suspended, we are naturally led to inquire if any change in the quantity of blood sent along the arteries of the brain could account for the suspension of its functions. With this view, we performed several experiments upon dogs. A tube, furnished with a stop-cock, was introduced into the trachea, and firmly secured there; the femoral artery was then laid bare, that the changes in the blood might be observed, and the number of pulsations more carefully reckoned. We shall give the details of four of these experiments. After the femoral artery had been laid bare, the pulse ranged from 105 to 120 in a minute, and the respirations were very short and rapid. At the end of the first half minute after the stop-cock was turned, the pulse was 92. At one minute and a half, the pulse was about 120, the animal had begun to struggle, and the blood in the artery was decidedly dark. At the second minute, the blood in the artery was nearly as dark as in the accompanying vein, but, from the struggles of the animal, it was impossible to reckon the pulse. At the end of two minutes and a half, the animal had ceased to struggle, was evidently insensible, and the pulse was 42. At the beginning of the fourth minute, the pulse was still 42. The stop-cock was now opened, and the animal allowed to breathe. When the blood was becoming red in the artery, the pulse was 78. A short time after this, when the animal was rapidly recovering its consciousness, the pulse was 60, and the respirations about 132. In another experiment, the pulse was 80 at the time when the stop-cock was closed. At the end of the first minute, the pulse was 114, and the blood was decidedly darker, and the animal was struggling. At the end of one minute and a half, the animal was struggling, and the blood was nearly as black as in the accompanying vein. At the end of two minutes and a half, the pulse was 60, irregular in frequency—two beats following each other rapidly; the animal had ceased to struggle, and the blood was as dark as in the vein. At the end of the third minute, the pulse was still 60, and irregular. In a third experiment, the pulse was 100 before the stop-cock was turned. At the end of one minute, the blood was getting dark, the animal had begun to struggle, and the pulse was 120. During the course of the second minute, it struggled violently, and the pulse could not be reckoned. At the end of two minutes and a half, the animal had ceased to struggle, the respirations were few and heaving, and the pulse was 78. At the end of the third minute, the pulse was 60. In a fourth experiment, the pulse ranged from 88 to 96 before the stop-cock was turned. After half a minute, the pulse was 71, and the blood was somewhat darker. After two minutes and a half, the animal had ceased to struggle, the blood was as dark in the artery as in the vein, and the pulse was 70. At the end of the third minute, the efforts at breathing had nearly ceased, and the pulse was 66. In such experiments as these, it is impossible to ascertain the exact frequency of the pulse at the precise moment when the sensorial functions are suspended, in consequence of the struggles and convulsive movements with which this is preceded. Taking, however, all the circumstances of the experiments into account, and combining with them the facts ascertained in those previously detailed, to prove that the arterial and venous pressure is not diminished at the time that the animal has become insensible, we have little difficulty in arriving at the conclusion, that, though the pulse has become less frequent about the time that the insensibility has supervened, yet that this has not taken place to such an extent as to justify the opinion that the arrestment of the sensorial functions depends upon any diminished transmission of blood through the vessels of the brain. If a diminution in the frequency of the pulse, to the extent we have indicated, could produce insensibility, this would frequently present itself during the course of disease, and under other circumstances where nothing approaching to it is observed. It must also be remembered that the pulse, as ascertained before the experiment has been commenced, must have been more frequent than usual, from the terror of the animal. In these experiments, I regarded the animal as in a state of insensibility when the struggles and convulsive movements had ceased. The function of respiration continued for a short time after the suspension of the sensorial functions, but rapidly became enfeebled. The circulation of the dark blood in the vessels of the encephalon, therefore, arrests the functions of the cerebral hemispheres before those of the *medulla oblongata.*

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[1] Hunter's Works by Palmer, Vol. iv, p. 168–170.

[2] Opus cit. p. 194.

[3] Opus cit. p. 193.

Dr. Kay has performed several experiments,[1] from which he has drawn conclusions very different from those which we have just stated. He found, that when the abdominal aorta was cut across in a rabbit of the ordinary size, "nearly seven drams and three quarters of blood would escape from the divided aorta when respiration was unobstructed." He then proceeded to cut this vessel across at different periods after the admission of fresh air into the lungs was precluded, and found that, when cut across half a minute after this, the blood collected almost equaled what would have escaped. if the free access of air into the lungs had been permitted. In another animal it was cut across after a minute and a half, and five drams of blood escaped; when postponed to two minutes and a half, four drams were collected; and when delayed to the termination of the third minute, only two drams were collected. In judging of the value to be attached to these experiments of Dr. Kay, two circumstances are to be taken into account—the time an animal requires to bleed to death; and the precise time at which the sensorial functions are arrested. As there can be no doubt that an impediment to the circulation through the lungs does not occur in the course of the process of asphyxia, it is, therefore, a matter of considerable importance to ascertain not only the precise time at which the sensorial functions are arrested, but also the average period of time which the blood would continue to flow from a cut artery when the respiration is unobstructed, before we can venture to determine whether there is any relation between the suspension of the sensorial functions and the arrested circulation in the lungs. With the view of satisfying myself on these points, the abdominal aorta in a rabbit, breathing naturally, was cut across a little above its bifurcation. The blood continued to flow freely for about one minute; it flowed feebly for another minute; and very feebly for about forty seconds more. In this experiment, two minutes and forty seconds elapsed before the bleeding from the artery had ceased. Though in some subsequent experiments the hemorrhage had ceased in a somewhat shorter time, yet we believe that in the rabbit it seldom stops before two minutes have elapsed. With regard to the other point we have mentioned, viz. the exact period at which the sensorial functions are arrested, this has been most unaccountably overlooked by Dr. Kay. He seems not to have been aware that a dog generally becomes insensible in from two to two minutes and a half, and a rabbit in one minute and a half, after the complete occlusion of air from the lungs, so that experiments such as those he has related, made to ascertain the quantity of blood which flows from a cut artery at periods posterior to the occurrence of the suspension of the sensorial functions, cannot be adduced in explanation of effects which have previously happened. In performing the experiments as I have already mentioned, I took the cessation of the struggles and the convulsive movements of the animal as a test of insensibility. When a ligature is tied tightly around the trachea of a rabbit, the animal moves about nimbly at first, but before one minute and a half have elapsed, it has fallen down in a state of insensibility, and the attempts at respiration are few and heaving. As the manifestation of the functions of the *medulla oblongata*, upon which respiration depends, are not necessarily linked with that of the functions of the cerebral hemispheres or the sensorial functions, it must be evident that, in attempting to discover the cause of the cessation of the mechanical movements of the chest, the frequency of the respirations ought to be attended to, and not the suspension of the sensorial functions. This circumstance has not been overlooked by us in performing these experiments; and we are satisfied that the function of respiration is much enfeebled at a period of the process of asphyxia, when this cannot be explained by any diminution in the quantity of blood sent to the *medulla oblongata.* No doubt, respiratory movements may be observed after the pulsations have been very considerably diminished in frequency, but these have become few in number, and performed at long intervals before this condition of the circulation has been induced; but it is quite possible that the ultimate cessation of the functions of the *medulla oblongata* may be hastened by the diminished quantity of blood sent along the arteries supplying it. If we proceed, therefore, to analyse the experiments of Dr. Kay, bearing in mind the length of time the blood continues to flow from the divided abdominal aorta of a rabbit, and the precise time at which the sensorial functions are arrested in the process of asphyxia, we must arrive at very different conclusions from those which he has deduced from them.

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[1] Opus cit. p. 185–88.

In further confirmation of the views we are advocating, we may appeal to the experience of every practical physician; for he cannot have failed to observe the gradual torpor that frequently creeps over the sensorial functions in severe cases of bronchitis, when an ill-arterialised blood is circulating in the vessels of the brain, and the pulse is still pretty strong at the wrist.

We feel very strongly convinced that Dr. Kay has fallen into another error in stating, that, three minutes after the entrance of air into the lungs had been prevented, the blood in the arteries had assumed the venous hue "still imperfectly;" for, in numerous experiments, various gentlemen who were present all agreed that the colour of the blood in the arteries was as dark as that contained in the accompanying veins at a period anterior to this. The statement of Bichat, that the blood in the arteries exactly resembles venous blood in a minute and a half or two minutes, is, I am satisfied, much nearer the truth.

From the various facts we have mentioned, we have arrived at the conclusion, that the suspension of the functions of the encephalon are chiefly, if not entirely, dependent upon the circulation of venous blood in the arteries. We do not, however, maintain that venous blood exerts any noxious influence upon the functions of the nervous texture; but believe that the effects are solely to be attributed to the want of the proper excitation of the organ; for, when the circulation of arterial blood is renewed, its functions rapidly remanifest themselves, provided that this be done within a given time.

We believe, then, that, in asphyxia, the order of succession in which the vital processes are arrested, is as follows:—The venous blood is at first transmitted freely through the lungs, and reaches the left side of the heart, by which it is driven through all the textures of the body. As the blood becomes more venous, its circulation through the vessels of the brain deranges the sensorial functions, and rapidly suspends them, so that the individual becomes unconscious of all external impressions. The functions of the *medulla oblongata* are enfeebled about the same period that the sensorial functions are arrested, but are not fairly suspended for some time longer. Immediately after the sensorial functions are suspended, and the blood has become still more venous, it is transmitted with difficulty through the capillaries of the lungs, and consequently begins to collect in the right side of the heart. A smaller quantity of blood must now necessarily reach the left side of the heart; and this diminution of the quantity of blood sent along the arteries, conjoined with its venous character, and the ultimate arrestment of the circulation, being circumstances incompatible with the manifestation of vitality in the other tissues of the body, general death is sooner or later induced.

The persistence of the muscular contractility after the arrestment of the circulation varies, as we have had frequent opportunities of witnessing, according to the age and strength of the individual, and also in a very marked manner from constitutional causes, which are unknown; and in this way we are able to explain how the heart's action may be renewed a considerable time in some cases after apparent death, while in others all the attempts to restore animation, though commenced shortly after the suspension of the sensorial functions, have failed. It must be obvious, that the first and principal object in the treatment of asphyxia is to restore the circulation through the lungs. If once we succeed in this, and thus renew the heart's action, the arterial blood is again transmitted to the encephalon and the other tissues of the body; the functions of the *medulla oblongata* remanifest themselves; the sensorial functions are gradually restored; and the animal heat returns. The derangement of the functions of the *medulla oblongata* and the sensorial functions are not necessarily coequal in extent, and never in importance, in asphyxia, and this is well observed in some of those cases of death from disease or narcotic poisons, where the process of asphyxia occurs more slowly and gradually. In these it is not unusual to find the sensorial functions nearly or entirely suspended, at a time when the respiration is pretty effectively carried on; and it is evident, from various facts, that the arrestment of the muscular respiratory movements is not dependent upon the suspension of the sensorial functions, but upon those of the *medulla oblongata*.

We shall now proceed to make some remarks upon the increased force with which the blood is sent along the arteries during muscular contraction. It has been proved, as we have already mentioned, that the blood is sent with greater velocity and increased force along the arteries during the contraction of the muscles of the limbs and trunk, as in exercise, and this takes place in a more marked manner during violent attempts at expiration. On the other hand, during violent attempts at inspiration, the pulse becomes less frequent, feeble, and soft. In some of the experiments we performed, as we have already mentioned, the mercury rose as high as the eleventh, and in one to the twelfth inch of the scale attached to the tube, during violent attempts at expiration, and the struggles of the animal; while it fell as low as the second inch, during violent attempts at inspiration. During these different conditions, the pressure upon the external surface of the heart, and its position in the chest, must be somewhat altered, a certain amount of pressure being applied to its outer surface during expiration, and removed during inspiration; and it recedes deeper into the chest during inspiration, and again comes forward during expiration;[1] but we may safely set those aside as exerting any appreciable influence in the production of the phenomena in question. Müller believes that the increased contractions of the heart, accompanying muscular movements of the trunk and limbs, may be caused by a sympathetic or reflex action—an excitant effect being produced in the filaments of the nerves distributed in the contracting muscles, which, being conveyed inwards to the spinal cord, is reflected upon the heart. As, however, he adduces no direct evidence in favour of this opinion, we do not feel inclined to abandon the old explanation, that this is merely dependent upon the mechanical acceleration of the blood, by the pressure exerted upon the bloodvessels by the surrounding muscles during their contraction, and the more especially as we have witnessed several facts which at least prove that a great part of the phenomena in question may arise from this cause. We have frequently remarked, that when an animal was breathing very rapidly, even above 100 in a minute, through a tube in the trachea, that the mercury did not rise higher in the instrument than before, and that the range was limited, provided the expirations were always short, and, consequently, not attended with much compression of the bloodvessels in the thorax and abdomen. On the other hand, a marked rise of the mercury took place whenever a forced expiration was made, however slowly this was performed. It was also repeatedly observed, that when one instrument was fixed in the femoral artery, and another in the femoral vein of the opposite limb, the mercury stood considerably higher in the instrument fixed in the vein than in that fixed in the artery, when the animal began to struggle violently. In few of the experiments did the mercury rise much above eleven inches in the instrument in the artery, while it frequently ran over the top of a tube twelve inches high, with considerable force, in the instrument fixed in the vein—showing us in some of these experiments a prodigious increase in the pressure upon the inner surface of the venous system, equal to between three and four pounds on every square inch of surface. This greater elevation of the mercury in the instrument fixed in the vein, can only be explained by the effects of the mechanical pressure of the surrounding muscles becoming increased, as the extent of the vascular tubes over which it is exerted becomes elongated, and may afford some indications of the greatly increased impulse communicated to the blood by the powerful pressure exerted by the contraction of the muscles of the chest and abdomen upon their contained bloodvessels, when aided by the contractions of the muscles of the limbs, and favoured by the presence and particular disposition of the valves of those bloodvessels. It is difficult to determine, then, how much this increased flow of blood along the vessels during violent expirations, and during the contraction of the muscles of the limbs, depends upon more forcible contractions of the heart, or upon the mechanical effects of temporary pressure upon the bloodvessels. The increased rapidity and strength of the contractions of the heart during violent expirations, must be partly attributed to the compression of the bloodvessels of the lungs, and the transmission of an increased quantity of blood to the left side of the heart, while the diminution in the strength and frequency of the pulse during inspiration must, in a great measure at least, depend upon the sudden removal of that pressure, so that a great part of the blood propelled during a few of the contractions of the right side of the heart, which immediately succeed the sudden dilatation of the thorax, goes to fill up the bloodvessels of the lungs to that state of plenitude in which they were before the preceding expiration, and a small quantity only reaches the left side of the heart.

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[1] In mentioning this fact in the article Heart, in the Cyclopedia of Anatomy and Physiology, the word inspiration has been inadvertently printed for expiration, and *vice versa*.

We do not think it necessary to make any remarks upon the question, whether or not the blood stagnates in the lungs, in consequence of the cessation of the chemical changes between the blood and the atmospheric air, or upon any supposed effect which the venous blood may have upon the contractility of the capillary vessels of the lungs, as this has already been most ably and most satisfactorily done by Dr. Alison. He has shown that this phenomenon is to be referred to an interesting general law in physiology, which has hitherto not received the attention which its importance demands, by which the movements of nutritious juices is influenced by the chemical changes, or, as he terms them, the vital attractions connected with the chemical changes, which are constantly going on in the capillary vessels between those juices and the surrounding tissues, by which nutrition and secretion are effected. That such a moving power exists, regulating the quantity of blood which flows through each individual organ, independent of any impulse from the living solids, cannot be doubted.[1] Before arterial blood can be transmitted freely through any tissue or organ, it is not only necessary that the contractions of the heart be performed with a certain amount of force, but that the actions of nutrition and secretion be also in operation; so in the same manner, before the blood can be transmitted through the lungs, it is not only necessary that the right side of the heart retains its contractility, but that the chemical changes between the blood and the atmospheric air should proceed. This doctrine is still further illustrated by the fact which we have ascertained, that, when the blood in the systemic circulation becomes decidedly venous, and unfit for carrying on the process of nutrition, it passes less freely through the capillary arteries into the veins.

BIBLIOGRAPHICAL NOTICES.

Robertson on the Teeth.[2]

We have had, in recent times, several excellent treatises on the teeth, but they have been directed rather to the anatomy and physiology of those organs than to their pathological and therapeutical relations.

The author is of opinion that the destruction of the teeth is effected by the corrosive or chemical action of the solid particles of the food, which have been retained, and undergone a process of putrefaction or fermentation, in the several parts of the teeth best adapted for their reception. This we think very questionable. The process of decay certainly commences, in general, in the interior of the tooth, whence it proceeds towards the circumference; and we think there is great reason for the belief, that the decay is rather dependent upon intrinsic than extrinsic causes. The work, however, contains many valuable practical observations, and is adapted both for the professional and the *lay* reader.

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[1] Vide Outlines of Physiology, 3d edition, p. 22–25, 61–64, and 224.

[2] A Practical Treatise on the Human Teeth; showing the Causes of their Destruction, and the Means of their Preservation. By William Robertson. With plates. First American from the second London edition. 8vo. pp. 229. Philadelphia, 1841.

Traill's Medical Jurisprudence.[1]

The valuable work of our friend, Professor Beck, has been so long before the profession, that it is not necessary for us to speak of its sterling merits. Still there has been room for a smaller treatise, that may give the "outlines" of the science, leaving it for those who may wish to study the subject profoundly to consult the larger. Dr. Traill has supplied such a desideratum, and has given, in epitome, the leading general principles of medical jurisprudence, and of medical police.

The American editor "has restricted himself to the correction of errors, and to the adding of such notes as appeared to him to throw additional light on the topics discussed in the text."

Sir James Clark on Climate.[2]

The reception which this work has experienced from the profession—as indicated by its being in its third edition—is a sufficient evidence of its worth. The distinguished author has had ample opportunities for testing the sanative agency of different climates, and is possessed of excellent powers for improving those opportunities. Since the work was given into the hands of the compositor, we have seen it advertised for republication in New York, so that it will be placed fairly before the profession of this country. Sir James has had no experience of the climates on this side of the Atlantic, but he indulges in philosophical reflections which may be applied to all.

Tweedie's Library of Medicine.[3]

This volume concludes the Library of Practical Medicine proper, and is equal to any of its predecessors. The encomiums which we have passed upon them, may with much propriety be transferred to this. It contains, also, a general index to the series.

The enterprising publishers have in press a System of Midwifery, from the able pen of Dr. Rigby, and they propose to publish a forthcoming surgical work, as soon as it appears in London, with notes by an American surgeon.

The whole series will be well worthy of a place in the library of the practitioner.

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[1] Outlines of a Course of Lectures on Medical Jurisprudence. By Thomas Stewart Traill, M. D., F. R. S. E., &c. &c., Regius Professor of Medical Jurisprudence and Medical Police in the University of Edinburgh. First American from the second Edinburgh edition. Revised, with numerous notes. 8vo. pp. 234. Philad. 1841.

[2] On the Sanative Influence of Climate. By Sir James Clark, Bart., F. R. S.; Physician in Ordinary to her Majesty and to Prince Albert, &c. &c. Third edition. 12mo. pp. 337. Lond. 1841.

[3] Dissertations on Hemorrhages, Dropsy, Rheumatism, Gout, Scrofula, &c. &c., with a Formulary and General Index. By Geo. Burrows, M. D., &c. &c.; Geo. Budd, M. D., &c. &c.; Thomas Watson, M. D., &c. &c.; Thomas Shapter, M. D., &c. &c.; Richard Rowland, M. D., &c. &c.; William Budd, M. D.; Arthur Farre, M. D., &c. &c.; and W. Bruce Joy, M. D., &c. &c. Edited by Alex. Tweedie, M. D., F. R. S., &c. &c. with Notes by W. W. Gerhard, M. D., &c. &c. 8vo. pp. 514. Philad. 1841.

Rauch's Psychology.[1]

To the first edition of this work, we drew the attention of our readers in the last volume of the Intelligencer. The call for a second edition so soon, sufficiently indicates the value that is placed upon it. Since the appearance of the first edition, the talented author has died, leaving a void not easily filled in the respectable college over which he so ably presided.

New York Medical Gazette.

We have received the first number of a new weekly under this title, edited by Dr. William C. Roberts, of New York; and we hail its appearance with pleasure—coming, as it does, so immediately after the decease of the New York Quarterly. The superior advantages of New York for medical instruction have been pointed out most elaborately of late, and we see no reason why she should not possess them; but if such be the fact, there certainly must be lukewarmth in the cause of medical science, when we see the difficulty in establishing a successful medical journal in that city.

The present undertaking, we trust, will succeed better than its predecessors. The number before us contains contributions from Prof. J. B. Beck, of the College of Physicians and Surgeons, and from Dr. J. Kearny Rogers, surgeon to the New York Hospital.

MISCELLANEOUS NOTICES.

Dr. Paine and Dr. Bowditch.—The controversy between these gentlemen, growing out of the work of the former, has closed, and we trust amicably, notwithstanding the war of words that has existed for some time between them. As in every controversy of the kind, the parties have disturbed their own equanimity without making much impression upon those whom they are desirous of convincing; for it rarely happens that the contending parties produce any change upon each other's opinions; and the public generally interest themselves but little in the merits of the question, whilst they are always ready to censure both parties. So satisfied are we that this is the general feeling, that it would be difficult to induce us to engage in literary warfare. Notoriety is sometimes acquired by such displays, but it is unenviable; and therefore undesirable. It rarely happens, too, that the points in dispute remain the same as in the first instance. Language is misunderstood, and clearness of perception largely interfered with, by involuntary prepossessions or insufficient examination. Of this, we have an example in the Rejoinder of Dr. Bowditch to Dr. Paine's Reply, (supplement to Boston Med. Journal, June 16, 1841,) in which Dr. Bowditch states that

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[1] Psychology; or a View of the Human Soul, including Anthropology. Adapted for the use of colleges. By Rev. Frederick A. Rauch, D. P., late President of Marshall College, Penn. Second edition, revised and improved. 8vo. pp. 401. New York, 1841.

we have accused him of being too severely personal. His words are—"Moreover, having been accused of being too severely personal, (Dunglison's Journal,) it gratifies me to find that one journal in this country sustains me, (Baltimore Medical and Surgical Journal,)" &c. Our remarks, (Oct. 15, 1840,) were—"The author (Dr Bowditch) is an estimable individual; but his zeal for a favourite preceptor (Louis) has outrun his discretion. The 'remarks' are polemical throughout, and often—what is always to be deprecated—personal." Dr. Bowditch is not accused by us of being "too severely personal;" nor do we find that the Journal, which he quotes, "sustains" him in being so.

We cite this as an evidence merely of the facility with which new points may arise in pending controversies. The matter had now better rest; already, indeed, the points of discussion are forgotten by most persons; and all that remains, is a vague recollection that an angry discussion had been carried on between two respectable individuals, in relation to something connected with M. Louis.

Water Doctors.—We learn that, in Paris, the homœopathist is hiding his diminished head before the water doctor, who is the author of the new system

> "to make the vulgar stare,
> Till the swoln bubble bursts, and all is air."

It is strange that the established inanity of all empirical pretensions, from those of Dr. Rock and Dr. Solomon downwards, has not taught the public to profit by experience. They are as ready as ever to follow in the wake of every advertising quack. The second number of the New York Gazette animadverts with propriety on the system for notoriety and pelf, pursued by men who are in the ranks of the profession, and who stoop to the vilest of charlatanry, only to be equaled by the vendors of razor strops, bear's grease, &c. The true vehicles for professional communications are the medical journals, and we trust—with the editor of the London Lancet—"that before long, no greater condemnation can attach itself to the reputation of a medical man, than to have his name vaunted, and his deeds praised, in the ignorant effusions of the political journals."

Stewart on the Diseases of Children.—In speaking of this work, recently published, the editor of the Boston Medical and Surgical Journal remarks—"Should the present race of medical critics be sparing of praise, it is quite certain that posterity will do justice to the patience, genius, and professional attainments of the author." We doubt not that this praise is merited; but for ourselves we wish to say, that the reason why we "are sparing of praise" is, that the work has never been sent to us; and we suspect that such is the case with other "medical critics" besides ourselves. It is a common law with editors, that in order for a book to be noticed at all, it must come before them in the legitimate mode.

Medical College of Ohio.—The Annual Catalogue for 1840–41 contains the names of 130 students: of whom there were from Ohio, 95;

Indiana, 9; Illinois, 3; Kentucky, 7; Louisiana, 1; South Carolina, 1; Mississippi, 1; Massachusetts, 2; Virginia, 1; New York, 3; Missouri, 1; Pennsylvania, 5; Canada, 1.

The number of graduates was 31.

William and Mary College, Virginia.—We find by the Annual Catalogue of this old and respectable institution, that Professor Millington undertakes a class for medical instruction, for which he possesses ample means of illustration. The subjects taught in the first session, are anatomy, physiology, materia medica, and pharmacy. In the second session, anatomy of the nerves and organs of sense, pathology and therapeutics, operations of surgery, materia medica and pharmacy continued and concluded. The text books are the same as those used in the principal medical colleges.

Pennsylvania Medical College.—Dr. R. M. Bird has been appointed to the vacancy occasioned by the death of Dr. Colhoun. Dr. Bird is an estimable and accomplished gentleman.

Medical College of the State of South Carolina.—The Annual Report—which contains an able valedictory address to the class, by Prof. Dickson—gives the names of 51 graduates: of whom 41 were from South Carolina; 4 from North Carolina; 4 from Alabama; and 2 from Georgia.

Dr. Geddings has been transferred to the surgical chair vacated by Dr. Wagner, owing to ill health.

Vermont Academy of Medicine.—The Annual Catalogue and Circular of the Vermont Academy of Medicine for the session of March, 1841, contains the names of fifty-four medical students.

Medical Department of Transylvania University.—Dr. E. Bartlett has been appointed to the chair of the theory and practice of medicine, vacated by the able teacher, Dr. N. R. Smith, of Baltimore.

Berkshire Medical School.—Dr. James M'Clintock, Professor of Anatomy in the Vermont Academy of Medicine, has been appointed to the same chair in the Medical School at Pittsfield, Mass.

Poisoning by Solution of Acetate of Lead—Lead found in the Urine.[1]—A young girl of good constitution, driven by despair to suicide, took about an ounce of acetate of lead in solution. She was almost immediately seized with collapse and syncope, and afterwards with vomiting and convulsions. Sugared water, sulphate of magnesia, and sulphate of soda, were given, but she died in twenty-five hours. She voided a large quantity of urine, which M. Villeneuve sent to M. Orfila. Carbonised, treated by nitric acid, and submitted to the tests of the salts of lead, this urine afforded a sensible quantity of lead.

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[1] Journal des Connaissances Médico-Chirurgicales, Janvier, 1841; and Brit. and For. Med. Review, July, 1841, p. 249.

On the Employment of Arsenious Acid in Phthisis Pulmonalis. By M. Trousseau.[1]—M. Trousseau is now making trial of the powers of arsenic in phthisis at the Hospital Necker; a means, however, not new, as Dioscorides employed fumigations of the sulphuret of arsenic in the same disease. During some few months, M. Trousseau has submitted eight patients to the action of this agent. In four affected with diarrhœa, the disease continued its progress; it was in an advanced stage, and death occurred in the usual manner. In four others, notwithstanding vast caverns, and symptoms which announced approaching death, the symptoms amended under the influence of arsenious fumigations, the general health improved, appetite returned, digestion was good, emaciation checked, and the cough and expectoration diminished.

A sheet of white paper is dipped in a solution composed of one part of arseniate of soda and thirty parts of water. The paper is then made into little cigars of the length of a finger, and the patient is directed to smoke one, or even two, daily, in such a manner that the fumes may pass into the lung. This is readily accomplished, by the patient inspiring the moment the fumes enter the mouth. This inspiration of arsenious vapour at first causes slight cough, but after some time both cough and expectoration are much diminished.

This means, though it has not as yet cured phthisis, deserves a trial. In one case of chronic catarrh with emphysema, it rapidly removed symptoms of suffocation. Careful experiments should be made with this remedy, for phthisis is a disease hitherto so incurable, that any thing which affords any probability of effecting permament good is worthy of investigation.

On Tincture of Iodine as a topical Application to Phagedenic Chancres. By. M. Ricord.[2]—After a trial of all the most common topical applications recommended in the treatment of phagedenic chancre, M. Ricord finds them all frequently inefficacious, and from none has he obtained such prompt and happy results as from the tincture of iodine. He has employed this tincture during the last three months, and almost constantly obtained a prompt modification of the ulcerated surfaces, which soon lose their phagedenic character. This has occurred in many cases. The action of the iodine was particularly evident in a patient who had an open bubo, the ulceration being phagedenic and very extensive. Various means were employed during two months without success, when the tincture of iodine alone so modified the ulcerated surfaces, that their extent visibly diminished from day to day. The iodine of potassium had been given in this case without effect, but its use was continued conjointly with the tincture of iodine as a topical application. The cure was perfect in less than a month.

Ectropion cured by Autoplasty. By M. Bérard.[3]—M. Bérard presented to the academy a young butcher, whose inferior eyelid, all except the free border, had been destroyed by a malignant pustule. After having arrested the progress of this terrible disease, M. Bérard sought to repair the loss of substance, and prevent greater depression of the free border of the eyelid already affected by ectropion. A portion of integument was taken from the temporal region, and applied just below the inferior eyelid. The superior border of this slip became united to the inferior border of the eyelid, and its inferior border to the superior edge of the malar integuments. The whole was maintained in apposition by simple agglutinatives. Four months after the operation, the wounds are cicatrised, the new eyelid is perfectly vital, and of a tint precisely similar to that ordinarily seen in the situation which it occupies.

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[1] Bulletin Général de Thérapeutique. Février 15 et 28, 1841; and Brit. and For. Med. Review, July, 1841, p. 249.

[2] Ibid. p. 252.

[3] Bulletin de l'Académie Royale de Médecine. Mars 15, 1841; and Brit. and For. Med. Review, July, 1841, p. 252.

Jaundice from Non-Elimination, together with Remarks on the Pathological Condition and Chemical Nature of the Bile. By W. H. Lowe, M. D.[1]—Dr. Lowe rejects the doctrine as purely hypothetical, that when jaundice appears suddenly, and without premonitory symptoms, it is due to spasm, or to the opposite condition, paralysis of the gall-ducts. Jaundice from non-elimination may take place, either with the liver in a state of disease, or when there is no appreciable disease in that organ. Of the latter species, Dr. Lowe furnishes a single case of his own, and refers to others. According to Le Canu, three views are entertained by chemists of the condition of the blood of icteric patients. Some believe that it always contains bile; others, that it contains none, but only a particular colouring matter; others adopt a middle view, and think that the blood of such patients, without containing all the constituents of bile, holds its colouring principles.

Dr. Lowe, without attempting to offer an exact analysis of the bile, gives the result of some experiments of his own, "which have been conducted on a somewhat extensive scale." He endeavours to show that the resin of Gmelin, the picromel of Thenard, and the choleic and choloid acids of Demarcay, are "one and the same thing." We must refer our readers to the author's paper, for the experiments on which he grounds this view.

Observations on Dropsy of the Pericardium. By John Mackenzie, Esq., Surgeon.[2]—The diagnosis of hydrops pericardii is still involved in obscurity and uncertainty. The difficulty connected with this subject arises from the rare occurrence of the disease unassociated with effusion into the pleural cavity, and to the still rarer opportunities of verifying such cases as do occur, by post-mortem examination. Having for several years been attached to a large military hospital in Russia, where chronic inflammation of the pericardium and consequent effusion were frequently met with, and where every facility of examining the bodies of those who died was afforded, I observed that, in those cases where there was co-existing effusion into the pleural cavity, the patients, from the commencement of the disease, could not bear the horizontal posture; and that, where the effusion was confined to the pericardium, the patients preferred to be with the head remarkably low, till general effusion took place, and the breathing became laborious: of these, some preferred to sleep on their face, inclining to the left side, in such a manner as to make the region of the heart the most depending part, whilst others lay on their back. After death, I found in some of these cases that the pericardium occupied nearly the whole of the chest, and contained from six to ten pounds of fluid. In two cases there was not a vestige of the left lung to be found, except a thin layer of cellular substance.

The reason why the horizontal posture was preferred in these cases, appears to be, that the weight of the pericardium was taken off the diaphragm and rested on the spine or the ribs. It is to be observed, that in hydrothorax, when the patient lies with his head low, the water in the chest flows back and presses on the root of the lungs, preventing a fresh ingress of air, and thereby causing dyspnœa and sense of suffocation; and that in hydrops pericardii this cannot take place, in consequence of the water being inclosed in a firm bag, which is bound down in its place by its attachment to the diaphragm. A very singular case of this disease came under my observation, where the patient could lie in all postures equally well, and experienced no inconvenience whatever; yet after death, which was caused by a sudden attack of inflammation of the right lung, the pericardium was found to occupy the whole of the left side of the chest, from the clavicle to the diaphragm, and contained ten pounds of thick brown fluid.

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[1] Edinburgh Medical and Surgical Journal, April, 1841.

[2] Lancet, April 17, 1841.

New Method of employing Iodine in Phthisis. By A. Leigh, M. D., Jersey.[1]—I direct the patient to apply a sufficient quantity of iodine ointment on the ribs, under both axillæ, and to cover the head with the bed-clothes, to breathe the iodine volatilised by the heat of the axillæ; the ointment produces counter-irritation on the skin where it is applied, and is to be repeated according to circumstances. This method has appeared to me to arrest the progress of the disease.

Case of Neuralgia Facialis cured by Operation. By T. T. Lambert, Surgeon, Hull.[2]—E. L., a female, aged sixty-three, had for several years been affected with a most painful condition of the nerves of one side of the face, coming on in paroxysms of the utmost severity, mostly towards night. At various times she had tried most of the usual remedies, without experiencing any thing but temporary alleviation. Under these circumstances, as the branches of the facial nerve seemed to be principally affected, the pain shooting across the cheek down towards the lower jaw, and occasionally upwards towards the temple, I proposed the division of the facial nerve in the parotid gland, after its exit from the foramen. To this the poor woman gladly consented, and I proceeded to perform the operation by making an incision betwixt the mastoid process and the lobe of the ear. My next incision brought me in contact with a nerve, which I supposed, from its situation, to be the auriculus magnus nerve, one of the ascending branches of the cervical plexus. On raising this nerve with my forceps, a state of tension seemed to be produced upon all the nerves of the face which were affected with the pain, and the patient exclaimed that was the place from whence all her pain proceeded. Under these circumstances, as the operation for the division of this nerve is trivial, compared with the division of the facial, and as it was just at hand, I determined to try the effects of its division; and the result was most satisfactory: the woman passed a delightful night, and enjoyed some good sleep. The next day she had a little pain; and from that time to the present she has been perfectly well, except having, on one occasion, a very trifling degree of pain. Four months have elapsed since the performance of this operation; and during this interval the patient has been exposed to the intense inclemency of the recent winter. I am not one of those who would pay too much attention to a solitary case; yet, as a single fact, this seems to me to be important, inasmuch as the means employed have effectually cured, for four months at least, and I hope permanently, a very severe case of neuralgic pain.

On the Use of Splints in Chorea. By G. Southam, Surgeon, Salford.[3]—I was led to try the experiment of confining the affected limb in splints, having frequently observed, in those instances where the convulsions had continued in spite of all remedial means, that if the patient's attention be directed to the deranged muscles, as, for instance, when in the hand and arm, causing him to grasp the sides of a chair, the motions comparatively cease; and this, when frequently repeated, proved a useful auxiliary in removing the disease. Upwards of two years ago, a case came under my notice where the convulsions had existed in the hand and arm for six months, though a variety of means had been adopted for their removal: believing them to depend on habit, from the control the patient had over the motions, and his apparently excellent health, I had recourse to the splints. For the first few days, the twitchings, from their violence, caused some difficulty in keeping the splints firm, but they soon diminished in force, and in three weeks had entirely disappeared. I have tried the same treatment in four other cases. In three, after attending to the bowels, I applied the splints, and continued them until a cure was established, which occupied in none more than a month. The convulsions were confined to one of the upper extremities, with slight dragging of the leg of the same side; but as the symptoms left the arm, the power over the leg returned, The other case occurred in a youth fifteen years of age. The convulsions were more severe, and rendered it extremely difficult to keep the splints firm with an ordinary bandage: to obviate this inconvenience, I used the apparatus recommended by Velpeau for fractures, with the addition of small splints to keep the limb extended and at rest during the consolidation of the apparatus. This was removed in a week to allow of exercise; and the severity of the convulsions being subdued, a common bandage and splints were again used. Though the convulsions affected both arm and leg, and splints were only applied to the former, the boy had recovered the use of both extremities in six weeks.

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[1] London Medical Gazette, May 28, 1841.
[2] Ibid, March 12, 1841.
[3] Ibid, May 7, 1841.

NECROLOGY.

The late Dr. Hope.—We regret to see, by the last number of the British and Foreign Medical Review (July, 1841), that the able author of the work on Diseases of the Heart, which is known by reputation to most, if not all, of our readers, died on the 15th of May last, at the age of 40, of pulmonary consumption.

Dr. M'Nevin.—We announce with regret the death of Wm. James M'Nevin, M. D., of New York, late Professor of Chemistry in the College of Physicians and Surgeons, and Professor of Materia Medica in Rutger's Medical School. He died on the 12th of July, at the advanced age of 79.

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For the American Medical Intelligencer.

ART. I.—CASE OF CYNANCHE LARYNGEA.

BY JOSEPH PANCOAST, M. D.

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George Faus—a child of four years, healthy, well formed, and active—had been subject, occasionally, for two years, to tonsillitis, with enlargement of glands of the neck, and a tendency to laryngeal inflammation.

In one of these attacks, I attended him some months ago. I was again called to him July 5, 1841. He had been three days sick, with sore throat, swollen tonsils, and enlargement of cervical glands. For the last twenty-four hours, he had had stridulous breathing, the inflammation having extended into the larynx. He was bled, leeched to the neck—puked with a combination of calomel, tartar emetic, and ipecacuanha—blistered at the nape of the neck, and over the top of the sternum; swabbed in the throat with a tincture of honey and sulphate of copper, and touched with lunar caustic. The disease yielded in the fauces, the swelling of the tonsils diminished, but, after thirty-six hours of apparent improvement, reappeared, without any known cause, with increased energy in the larynx. The breathing became gradually, in spite of the treatment, more noisy and oppressed, with heaving of the sternum, congestion of veins of neck, and suffusion of face. He expired on the 11th of July, suffocated by the false membrane in the cavity of the larynx. There was no indication of disease of the brain. The child's intellect was good to the last. From auscultation, there was no reason to suspect inflammation of the lungs. The child might probably have been saved by tracheotomy, which I urged on the parents, but to which they did not consent till it was too late to be of any avail.

Dissection of Thorax and Neck, July 12.—All the large cervical veins, and all the cavities of the heart, filled with black coagulated blood. The thymus and thyroid glands were larger than usual at that age. The deep-seated cervical and bronchial glands were unusually large, several being of the size of an almond shell. There were no pleuritic adhesion, no water in the chest, and but a teaspoonful or two in the pericardium. The lungs of both sides were every where crepitant, but engorged with blood and serum, exhibiting no manifest signs of pneumonia. The tonsils but little enlarged. Some superficial excoriation at the lower part of pharynx, caused, probably, by the use of caustic. The epiglottis red and injected; the mucous membrane, surrounding the upper opening of the glottis, swollen and of a purplish red hue, from the intensity of the inflammation. The whole cavity of the glottis was blocked up with a secretion of creamy tenacious lymph. On opening the trachea, the false membrane was seen to terminate abruptly about half an inch below the cricoid cartilage. The mucous membrane of the trachea and bronchia was slightly red, and injected as in catarrh, and much frothy mucus was seen at the bifurcation of the trachea. Not a flake of false membrane was found lower than half an inch below the larynx. The sound emitted by the child in breathing, was sharper and dryer; in other words, more laryngeal, and less tracheal, than in ordinary croup.

ART. II.—ENDERMIC USE OF SULPHATE OF QUININE IN INTERMITTENTS.

[Extracts from letters of Dr. G. Lane Corbin, dated Laneville, Warwick Co., Va., to Dr. John Redman Coxe, on the utility of the external application of sulphate of quinine in the cure of intermittents.]

"I have lately had a long standing and tormenting patient with intermittent fever of two years' continuance, during which period, every article hitherto recommended was tried with little or no perceptible advantage. Twenty-four hours before the expected ague, I applied five blisters, which were kept on eight hours. They drew very well; the places were washed with soap and water, and the dead cuticle removed from each sore, which were then coated with sulphate of quinine, which was reapplied as long as they continued to discharge. The patient has had no return of his ague, and has enjoyed very good health ever since.

"A few days ago I was called to a child with ague and fever, as its parents informed me, of six months' standing. I applied a single blister over the abdomen, which raised the skin sufficient for removal, and after ablution, as before, the quinine plaster was applied with the happiest result. Now both of these patients had taken many different articles previously to the employment of the quinine plasters, and possibly this previous treatment might have aided in the ultimate cure," &c.—*May* 29, 1841.

July 20.—"In my last, I mentioned the success that had attended the use of sulphate of quinine in old cases of intermittent fever. I now add two more to the number.

"E. S., aged twenty-eight, complains that for eighteen months he has been a martyr to ague and fever. At no one time during that period has he been free from it three weeks at a time. Appetite good—bad complexion—great weakness, and occasional shortness in breathing. Ague every other day at 11 o'clock—bowels open, discharges thin, and not very bilious—tongue clean, and of a bluish hue. Ordered five blisters to the stomach and each extremity, to be applied an hour before the expected attack, and to remain on eight hours; the skin to be then removed, and the following plasters applied—of sulphate of quinine 5 drams, simple cerate 4 oz., incorporated well together, and spread of the thickness of a blister. The application to the abraded surface was continued until the places became well. If the patient complains very much of the irritation, the plasters to be removed after the first twenty-four hours, the parts to be bathed with milk and water, and then reapplied. This patient has had no return of the ague, and only one disagreeable symptom, viz. strangury, which was relieved by nitre and demulcents.

"A girl of seventeen, irregular in her menstrual periods, had been treated by a physician with aloetic pills, and vol. tinct. of guiacum, for eight months, with partial relief as to the menstruation, but none as to the ague; feet somewhat swelled, and slight swelling under the eyes; her bowels irregular, sometimes very constipated, at others, loose and watery. I ordered six grains of blue mass every night; and two hours before the expected ague, to apply a large blister over the stomach, and one to each thigh, for twelve hours, treating the sores as above. The results were the same. The blue pill was continued only three nights. In this case, the sores mattered for five weeks, and the girl experienced great pain from the plasters, but she had no return of the ague after the first application of the quinine. I attributed, the uncommon irritation more to the peculiar temperament of the patient, than to the effects of the quinine."

Art. III.—*Analytical Account of the Researches and Rectifications in the practice of Auscultation and Percussion, made by Dr. Joseph Skoda, Teacher of Clinical Medicine in the Hospital of Vienna.* By William Drysdale, M. D. and John R. Russel, M. D.[1]

[Of the work of Dr. Skoda, and of the nature of his researches, a short sketch will be found in the second department of this Journal. Our limits do not allow us there to introduce so fully as they deserve, the researches of the author, and the rectifications which these researches have led him to propose. But we have great pleasure in inserting here the following account by two learned young friends, who have spent a considerable time in Vienna, and who attended the lectures, and enjoyed the benefit of the personal instructions and observations of Dr. Skoda. This account is the more valuable, that it was prepared upon the spot, and almost under the eye of Dr. Skoda, and was from time to time read to him as it was prepared, and therefore is most likely to contain a correct and faithful account of his views, which, it will be observed, are not less remarkable for their originality, than for the number and importance of the rectifications which the author introduces.—Editor of the Edin. Jour.]

I. *Auscultation.*

The auscultatory phenomena of the respiratory organs may be divided into those of the voice, the sounds of respiration, and those produced by the rubbing of the pleura.

On examining the chest of healthy persons, it will be found that the sound of the voice is heard to a certain degree, amounting to strong resonance in some parts of the chest, while in others it is either not heard at all, or merely as an indistinct humming or buzzing sound. The strength of the sound thus heard in healthy persons, is greatest between the shoulder-blades and the spines, weaker under the clavicles, and still weaker in the axilla, and over the rest of the chest; but it varies very much in intensity in different individuals. In disease it is so much modified, both in intensity and in the parts of the chest where it is heard, that many important indications may be derived from the varieties which it assumes.

Before considering the different kinds of resonance in detail, it is necessary to give an explanation of the mode in which the sound of the voice is transmitted through the chest.

As the voice is produced in the larynx, it must in all cases, whether weakly or strongly heard, be transmitted thence; and it would at first sight appear that the strong resonance is produced by a good, and the weak by a bad conducting power of the parts lying between the larynx and the parietes of the chest. Accordingly, it was long almost universally held by stethoscopical observers, that the increased resonance which accompanies a hard compressed state of the parenchyma of the lungs, or the presence of fluid in the pleura, depends on the increased conducting power of the intermediate substance. Several pathological facts, however, tend to throw doubt on the correctness of this explanation.

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[1] Edin. Med. and Surg. Jour., July, 1841, p. 88.

For example, if the chest be examined by repeated auscultation at successive intervals in the course of pneumonia, when there is hepatisation of the lung, resonance of the voice, at one time very strong, at another only weak, will be perceived, while the other signs, particularly percussion, show that no change has taken place in the degree of hepatisation. The cause of the occasional disappearance of the resonance of the voice, is the obstruction by fluid matter of the bronchial tubes of the hepatised portion of the lung; for the resonance reappears readily when the patient makes a deep inspiration, or coughs. This disappearance and return of the resonance, while in other essential particulars the hepatisation remains the same, does not accord with the commonly assigned cause; for, according to it, it would be a matter of indifference whether the bronchial tubes contained air or not. In pleuritic effusion into the cavity of the chest, the intensity of the resonance of the voice diminishes as the quantity of the exudation increases; while the contrary should happen, if the increased distinctness of the voice, at any stage of the effusion, depended on the superior conducting power of the interposed fluid. These contradictions to the commonly received explanation, demand more minute examination of the grounds on which it has been adopted.

The question of the superiority in conducting power of dense over rare bodies, has been too much regarded as an abstract law, without paying sufficient attention to the particular circumstances which may modify or prevent its operation. It is quite true that dense bodies conduct the sound more readily than rare ones, but only if the sound be confined to the medium in which it is formed, for it passes with difficulty from one medium to another. For example, the slightest scratching at the end of a long pole is heard distinctly when the other end is placed in contact with the ear, while, if this be not done, (*i. e.* if the sound be transmitted by the air,) nothing at all is heard. The striking together of two stones under water, when the head is immersed, is distinctly heard, while no sound is audible when it is taken out. On the other hand, the human voice which is formed in the air, is heard furthest in that medium. When the head is dipped into water, sounds produced in the air are heard very faintly, or not at all; and solid substances, as a board or a wall, interrupt sounds more or less completely. The laws of physics teach us further, that sound is more or less reflected in its transmission from a rare medium to a denser one, and that the new medium takes up less than would have been propagated in the same space had it remained in the medium by which it had been till then transmitted; and the less sound is taken up by the new medium, the greater the difference of consistence and coherence between the two media. The reason why enclosed passages and tubes, whose walls are of solid materials, conduct sounds better than the open air is, because they reflect the vibrations, which are thus confined to a small space, and prevented from being dispersed and lost in the surrounding air. If the walls of the tube were instrumental in conducting the sound, it is singular that a hollow tube should be used as a stethoscope, and not a solid cylinder of wood or metal. The voice, therefore, reaches the parenchyma of the lungs, not through the solid parts, but through the air in the trachea or bronchia, and ought to be carried further in the healthy lung, in which the air penetrates into the air-cells, than in the hepatised lung, where the air-cells and smaller bronchia are obliterated. The vibrations, likewise, should pass more easily from the ear into the light tissue of the healthy lung, than to the condensed parenchyma of the hepatised one, according to the law explained above.

A consideration of these facts would be almost sufficient in themselves to prevent us from acquiescing in the ordinary opinion, that the reason of the voice being louder when the lung is hepatised, than when it is sound and spongy, depends upon its being better conducted by the tissue of the lung when dense, than when in its natural condition. Moreover, Dr. Skoda has set this matter at rest by the following simple experiment, which he usually performs in the presence of his class, and which any one may easily repeat.

If the ear be applied to a stethoscope placed successively on corresponding parts of a sound and then of a hepatised lung removed from the body, the voice of another person who speaks through a stethoscope placed upon the lung at an equal distance in both cases, will be heard somewhat more distinctly in the sound than in the hepatised lung: but the distinction is so insignificant, that were the reverse the case, it would not account for the very marked difference in such a condition of the lungs in the living subject.

Dr. Skoda explains the different degrees of strength of the voice in the chest by the law of consonance.

The fact that a sound can be heard, observes Dr. Skoda, as distinctly at a distance as at the place where it is produced, can only be explained either by its diffusion being prevented, and its being obliged to remain concentrated during its progress, or by its being reproduced in its course by means of consonance, and thus increased. But if a sound be heard louder at a distance than at the place where it was originally formed, this must be by means of consonance alone.

Consonance is a term adopted by Dr. Skoda to express a well known phenomenon; and it may be here properly explained.

A tense guitar string sounds in unison with a note produced in its vicinity, either by another musical instrument or by the voice. A tuning fork held in the air, emits a much weaker sound than when placed upon a table or chest. The table or chest must increase the intensity of the sound, by assuming the same vibrations as the tuning fork, or, in other words, by consonating with it. The note of a Jew's harp is scarcely perceptible when it is struck in the air, and it is heard much more distinctly when played in the mouth. Thus the air in the mouth must increase the sound of the Jew's harp, *i. e.* must consonate with it.

It sometimes happens that the voice is heard more strongly at the thorax than at the larynx, which in itself is sufficient to show that its strength is increased by means of consonance within the chest. The different degrees of the intensity of the voice heard at the thorax, may be explained by the different strength of the consonance within the chest. To ascertain these changes, we must discover what it is within the chest that consonates with the voice, and by what circumstances the consonance is liable to be altered.

The voice, as it issues from the mouth, is composed of the sound formed at the larynx, and the consonating sounds produced in the pharynx, mouth, and nasal cavities. This is shown by the alteration the voice undergoes by the shutting and opening of the nostrils and mouth, while there is no change made in the larynx. The pitch of the voice is evidently fixed by the larynx alone, and the opening and shutting of the nostrils and mouth has no influence upon it; the articulation of the voice, however, and its timbre, depend upon the mouth and nostrils.

As it is certain that the air in the pharynx, mouth, and nostrils, consonates with the sound formed in the larynx, there can be no doubt that the air in the trachea and bronchia may also be thrown into consonant vibrations with the sounds formed at the larynx. Hence it is the air in the chest, and not the parenchyma of the lungs, which consonates with the voice at the larynx, as the latter seems ill adapted for consonating, being neither stiff nor sufficiently tense. Those substances, such as air, tense strings, membranes, slips of wood, and thin plates, in which a musical sound is most readily produced, are most easily thrown into consonant vibrations.

Air can consonate only when confined within a circumscribed space. In the open air, the human voice and every other sound is heard more feebly than in a room. The air confined within the box of a guitar, violin, piano, &c. consonates with the note struck on the strings, while the sound is not increased by the consonance of the external air. The strength of the consonance depends upon the size and form of the space in which the air is confined, and upon the properties of the walls which bound the space. It appears that the consonating sound of the enclosed air will be the stronger, the more perfectly the walls reflect the sounds which spread through the air. A space surrounded by solid walls produces the greatest consonance, while in a linen tent the sound is but little increased. The cause of the strengthening of sounds by the speaking-trumpet, is well known.

The air inclosed in a defined space does not consonate with every sound; and should it consonate with several different notes or sounds, it does not reproduce them all with the same degree of strength and clearness. No body can sound in consonance with another, unless it is itself capable of producing the same note, or one whose vibrations form an aliquot part of the note. (Baumgaertner's Physik 4 Ausgage Bd. I. p. 276.)

The deductions drawn from the physical principles just referred to, may be used in explaining the consonance of the voice in the chest. The air in the trachea and bronchia can consonate with the voice in as far as their walls resemble the walls of the larynx, mouth, and nasal cavities, in their power of reflecting sound. In the trachea, the walls of which consist of cartilage, the voice consonates almost as strongly as it sounds in the larynx. In the two branches, also, into which the trachea divides, the consonance must be nearly as perfect. On the entrance of the bronchia into the parenchyma of the lung, they have no longer cartilaginous rings, but merely thin irregular plates of cartilage interspersed in the fibrous tissue. As the bronchia ramify, these plates become smaller, thinner, and less numerous, and at last disappear altogether; and the finest twigs of the bronchia consist merely of membranous canals. In the normal state of the parenchyma of the lung, the air in the bronchia consonates less strongly with the voice than that in the trachea, in proportion to the smaller number of cartilages they contain. The conditions which increase the consonance of the voice in the air contained within the branches of the bronchia that ramify in the parenchyma of the lung, are either that the walls of the bronchia have become cartilaginous, or, if still membranous, very thick, or that the surrounding tissue of the lungs has become devoid of air;—in all these conditions the walls reflect the sound more strongly than the membranous walls of the normal bronchia; and there must be no interruption of continuity between the air in the bronchia and that in the larynx. If the air in a confined space be thrown into either original or imported autophonous vibrations, which give rise to sound, the surrounding walls not unfrequently partake of the same vibrations, and they do this the more readily the less stiff and hard they are.

The organ pipe vibrates when the air contained in it sounds. The same is true of the speaking-trumpet. The larynx vibrates with every sound produced in it, and its vibrations are perceptible through several inches of animal substance. The walls of the bronchiæ, which ramify within the parenchyma of the lungs, will, if the air within them consonate with the voice, be thrown into vibrations as readily as the larynx, and these vibrations may spread through a layer of fluid or muscle several inches thick, even to the parietes of the thorax, and the sounds produced by consonance in the bronchiæ will be perceptible at the walls of the chest.

In order to illustrate the above explanation of the difference of resonance of the voice in the chest, Dr. Skoda performed a considerable number of experiments, a few of which are the following.

As after death the bronchia are almost constantly found filled with fluid, the lungs themselves are rendered unfit for the purpose of experimenting, we must therefore choose other tissues whose powers of reflecting sound resemble severally that of the healthy and hepatised lung.

In this respect, a portion of the small intestine represents pretty well the more membranous parts of the bronchia, and a portion of the heart and liver the hepatised lung. If a person speak through a stethoscope placed on one end of a moderately inflated small intestine, consonant vibrations of the voice, in the air within the intestine, may be heard by another person listening through a stethoscope placed on the other end of the intestine. If a layer of solid or fluid substance be interposed between the mouth of the stethoscope and the intestine, as, for example, a piece of liver or of intestine filled with water, the sound is heard very indistinctly, and not at all if the thickness of the interposed substance reaches half an inch.

If a passage be bored in the liver, so as not completely to pierce it through, and this be spoken into by means of a stethoscope accurately fitted into the entrance of it, the voice may be heard along the whole length of the passage, and for a considerable distance on each side, through a stethoscope placed over it, so strong, that it by far exeeeds in intensity the voice proceeding from the mouth of the speaker, which is heard by the free air. The voice can still be heard even when a layer of liver, lung, cartilage, or bone, several inches in thickness, be interposed, although naturally weaker and weaker, as the thickness of the interposed substance is increased. If the liver be plunged in water, it is still heard through a stratum of water two inches thick. Similar experiments may be performed with the heart, and with the larynx and bronchi. If a piece of intestine, prepared as in the first experiment, be plunged under water, observing the precaution that no water gets into the stethoscope, the voice is heard much louder than if the experiment be made out of the water.

These experiments show tolerably distinctly what relation the voice in the thorax holds to the different conditions of the lungs. If the voice in the intestine, when not immersed in water, consonate so feebly as to be inaudible through a layer of lung, liver, or fluid half an inch thick, the consonance in the membranous bronchia will likewise be so slight as not to be heard at the walls of the chest. But, on the other hand, as the voice in the heart and trachea, and in the passage bored in the liver, consonated so strongly as to be heard through an interposed substance several inches thick, so will the voice in the bronchia of a lung, hepatised or infiltrated with tuberculous matter, consonate so powerfully as to be heard louder upon auscultation at the thorax, than as it issues from the mouth.

The consonating voice within the chest differs very much in clearness, loudness, and timbre or quality, from the voice proceeding from the mouth, and varies in itself at different times; but as the cause of these differences is not well understood, and as they do not afford any diagnostic signs, it is unnecessary to enter more minutely into them here.

II. *Morbid States of the Respiratory Organs which can give rise to an increased Resonance of the Voice.*

1st. *All morbid processes, by which the lungs can become void of air, dense, and solid, through infiltration of foreign matters.*—The walls of a bronchial tube surrounded with parenchyma, in this condition, must reflect the sound as well or better than the larynx. The strength of the consonance will be the greater, the denser the parenchyma. The diseased processes which bring about this change, are, hepatisation, infiltration of the parenchyma, with tuberculous matter and hemorrhagic infarction, or the pulmonary apoplexy of Laennec. In all these morbid states, before the increased resonance of the voice can take place, all the air must be completely expelled from the air-cells, and the condensed portion of lung must be of sufficient size to contain, at least, one of the larger bronchial branches, which must contain air, and be in communication with the larynx. The more extensive the hepatisation is, the more distinctly will the increased resonance be heard over the hepatised part. Accordingly, it is heard most frequently in extensive hepatisation, infiltration with tubercular matter, and the induration remaining after hepatisation. Incipient pneumonia, lobular hepatisation, (inflammation confined to individual lobules), œdema of the lungs, cause either no resonance, or only a trifling degree of it. Solitary tubercles, however numerous, cause no resonance, so long as the intermediate tissue contains air. As Laennec's apoplexy of the lungs is a disease only of rare occurrence, it is seldom observed as a cause of increased resonance, especially as it is, in general, confined to a small extent of the lung.

2. *The diseased states through which the lung becomes devoid of air in consequence of compression.*—In this state, the lung never reaches the same degree of solidity as in pneumonia or tuberculous infiltration, and, therefore, the resonance is never so considerable as in the latter affections. To admit of resonance being produced by compression of the lung, the compressed portion must contain a bronchial tube, sufficiently strong, from the number of its cartilages, to prevent the obliteration which happens to the merely membranous bronchiæ. Of all the numerous causes of compression of the lung, such as effusions in the pleura, tumours in the chest or abdomen, aneurism and effusion in the pericardium, curvature of the spine, &c. by far the most frequent, indeed almost exclusive, one of increased resonance of the voice, is the presence of fluid or air in the cavity of the pleura.

The quantity of fluid necessary to produce resonance, varies very much in different cases—in some, half a pound being sufficient, while in others several pounds are required.

Varieties of the voice heard in the Thorax.—In the healthy state, in all parts of the chest, except those immediately to be mentioned, there is heard no proper resonance of the voice, but merely an indistinct buzzing sound; but in the space between the scapulæ, the voice may in many persons be heard with different degress of distinctness, and sometimes so strong that a moderate concussion of the ear may be felt. The same may likewise sometimes be perceived in the spaces below the clavicles, though in a less considerable degree. This resonance of the voice never reaches that degree of clearness and strength which may present itself at any part of the chest affected with hepatisation or tuberculous infiltration.

The varieties in the morbid state are:—

1. Strong bronchophony, *i. e.* that resonance of the voice attended with simultaneous concussion of the ear, or, as Laennec describes it, which penetrates completely through the stethoscope.
2. Weak bronchophony, the voice without, or with imperceptible concussion of the ear, or which does not penetrate completely through the stethoscope.
3. The indistinct buzzing, with absence of all proper resonance.
4. The amphoric and metallic echoes.

The Strong Bronchophony.—The voice is heard as strong, or even stronger, or somewhat weaker, than in the larynx. Its appearance at any part of the chest indicates with certainty the existence under the spot of a solid, condensed portion of lung of considerable extent, which may either be in contact with the walls of the chest, or separated from them by a layer of solid or fluid exudation in the pleura of moderate thickness. The presence of fluid in the pleura can never of itself give rise to the strong bronchophony.

The diseased states, whose existence may be suspected from the presence of strong bronchophony, are,—Pneumonia, or pleuro-pneumonia, in an advanced stage, *i. e.* hepatisation, without any or with a moderate amount of pleuritic exudation; tuberculous infiltration of the parenchyma; hemorrhagic infarctus of considerable extent; thickening of the walls of the bronchia, with complete disappearance of the proper substance of the lung; carnification of the lung, or a very high degree of œdema of the lung, along with pleuritic effusion, by which the air has been completely pressed out of the tissue of the lung. Of these, however, the hepatisation and tuberculous infiltration are so much more frequently indicated, that the others may in practice be almost left out of view, as they are not only very rare, but also seldom reach such a height as to produce strong bronchophony.

Laennec thought that the resonance from cavities was of a peculiar kind, different from bronchophony. He named it pectoriloquy, and conceived it to be pathognomonic of excavation in the lungs. On close examination, however, it will be found, that of the characteristic signs of pectoriloquy given by Laennec, only one refers to the voice itself, viz. that in pectoriloquy the voice penetrates the stethoscope completely, while in bronchophony it merely enters it; and all the others are only collateral circumstances, such as the circumscribed or diffused extent of the sound, its timbre, the general symptoms, &c. But, as in many conditions of the lung just described, the voice penetrates the stethoscope completely, the distinction proposed by Laennec falls to the ground, and pectoriloquy must be considered as nothing but strong bronchophony, and, therefore, cannot be received as alone sufficient to indicate with certainty the presence of a cavity. As a cavity in a hepatised lung is very rare, while in a tuberculous one it is very frequent, we shall, in the latter disease, when strong bronchophony is heard, seldom err in diagnosticating a cavern at the place where it is strongest; but here our diagnosis does not rest on the character of the voice alone, but is aided by the other stethoscopic signs, and the general symptoms and course of the disease.

Weak Bronchophony.—To constitute weak bronchophony, the voice must be clearly and distinctly heard, but unaccompanied by little or no concussion of the ear. It may attend any of those diseases above enumerated as giving rise to strong bronchophony, and, in addition, pleuritic effusion of considerable extent and hydrothorax. Its presence alone is insufficient to determine the existence of fluid in the pleura, but recourse must always be had to percussion, auscultation of the respiration, position of the neighbouring organs in making the diagnosis.

Egophony.—A peculiar modification of the resonance of the voice has attracted the attention of stethoscopists, and there has been much discussion (on which our limits do not permit us to enter) to determine its cause and value as a diagnostic sign. It was conceived by Laennec to indicate the presence of a thin layer of fluid between the lung and the walls of the thorax; but later observations have established the fact, that it has been heard in cases of pneumonia and tuberculous infiltration, where there was no fluid at all in the pleura; also in cases where there was a very large collection of fluid in the pleura, and that it has been absent in cases of effusion of various amount; and finally, in some cases of effusion into the chest, as well as in pneumonia, without any fluid being contained in the pleura, individual words or even syllables partake of the trembling or egophonic character, while others are destitute of it. Egophony may be, therefore, regarded as a mere modification of bronchophony, which has no essential connection with the existence of fluid in the chest, and has otherwise no particular importance.

The strong as well as the weak bronchophony passes imperceptibly into the indistinct murmur, and there is no defined boundary between these two sounds. It is easy, indeed, to distinguish between the extremes; but the transition sounds it is extremely difficult to distinguish. No conclusion should be drawn from the resonance of the voice, unless it possesses the unquestionable character of bronchophony.

3d. *Indistinct Buzzing Sounds.*—This resonance of the voice affords no definite indication. It does not indicate that the organs are in a state of health, for, as many conditions are required to produce bronchophony, the absence of any one may prevent its appearance, *e. g.* the bronchial tubes may not be open, but obstructed with mucus, so that the consonance cannot take place, while, at the same, any one of the morbid conditions just mentioned may be present.

III.—*Auscultation of the Respiration.*

The passage of the air through the respiratory tubes causes in the healthy state certain sounds which are variously modified by disease.

The sounds produced by the respiration in the larynx, trachea, and larger bronchia, are of a rushing character, most closely imitated by, (as in the pronunciation of the consonant *ch*, German or Greek χ,) impelling the air against the hard palate. During gasping it is produced voluntarily. The pitch may differ according to the width of the opening admitting the air, and is generally higher in the larynx than in the lungs; but the character just mentioned remains always constant.

The respiratory murmur in the air-cells and smaller bronchia, resembles very nearly the sound produced by drawing in the breath with the lips nearly closed, or pronouncing the consonants *v* or *b* while inspiring, or, as it were, sipping the air. It is only heard during inspiration; and during expiration, there is heard in the air-cells and smaller bronchia either no sound at all, or a very slight blowing noise between the sound of *f* and *h*, pronounced in expiration. The respiratory murmur in the air-cells is heard most strongly and distinctly in children.

Varieties of Respiratory Sounds.—(Skoda.)—1, Vesicular Respiration; 2, Bronchial Respiration; 3, Indeterminate Respiratory Sounds; 4, Amphoric and Metallic Respiration.

The name vesicular respiration can only be applied to that respiratory murmur which resembles sipping air, as above described. No other sound which does not display this character distinctly can merit the appellation, even although occurring in healthy individuals. Such a sound can be produced in no other way than by the penetration of the air into the air-cells. The sound during expiration has no connection with vesicular respiration, for it may be entirely wanting, or may be strong or weak, without in the least influencing our judgment as to the presence or absence of the vesicular murmur. The cause of the vesicular murmur is the friction of the air against the walls of the air-cells and fine bronchial tubes, which, by their contractility, oppose a certain degree of resistance to its entrance. From this may also be explained the great disproportion between the strength of the respiratory murmur in the pulmonary cells during inspiration and during expiration, for in the latter the air encounters no resistance. The case, however, is different in the larger bronchia, and more especially in the larynx and trachea, for the air has no resistance to overcome in its passage through these during inspiration; on the contrary, it is rather drawn in by the rarefaction of that within the chest, while in expiration it passes from a larger space—the air-cells into a smaller one, the bronchia, trachea, and larynx, and is consequently compressed; therefore, the expiration is usually louder in those parts than the inspiration. The presence of the vesicular respiration in any part of the lung, is incompatible in it with any of those diseased states which prevent the penetration of the air into the air-cells, viz. compression of the parenchyma by exudation; tumours in the chest; enlargement of the heart; infiltration of the parenchyma, with plastic (that is pneumonic) or tuberculous matter, or with blood, serum, &c. But it can coexist quite well with solitary tubercles, however numerous, and with inflammation confined to single small lobuli, *i. e.* lobular hepatisation, and is frequently found along with these morbid changes.

The vesicular respiration may be increased to puerile respiration, which depends upon rapid and deep inspiration, and increased resistance of the cells, or it may be rough, from a change in the constitution of the lining membrane of the bronchia. The rough vesicular murmur indicates the least degree of swelling, and is always combined with increased loudness of sound. The vesicular respiration passes insensibly into the indeterminate respiration, and the rough into the rattles.

The vesicular respiration may occur without any sound in expiration, or such a sound may be present in various degrees of intensity. Sometimes the expiration is much louder than the inspiration. When a sound is present in expiration, it always indicates that there is present in the bronchia some obstacle to the discharge of the air, and this generally consists in a swelling of their lining membrane.

Bronchial Respiration.—To admit of a sound being recognised as bronchial respiration, it must have the same character as laryngeal or tracheal respiration, and can only differ from these in its pitch. It is imitated by blowing through a tube, or with the tongue and mouth, as in the position necessary for pronouncing the consonant *ch* in inspiration or expiration, as before explained.

The bronchial respiration indicates precisely the same states as the weak bronchophony, and these need not be again enumerated. But it never occurs in the normal condition of the respiratory organs, and, therefore, it always indicates a morbid state, even when occurring in the space between the shoulder-blades, except in the neighbourhood of the first dorsal vertebra, where it is heard in rare cases in healthy subjects, in dyspnœa, or deep inspiration.

The production of the bronchial respiration, like bronchophony, has been attributed by Laennec, Andral, and others, to the increased conducting power of the condensed lung, (which renders the rushing noise of the air streaming in and out of the bronchiæ more audible.) But, in addition to the foregoing arguments, opposed to better conduction of the voice, depending on the condensed state of the lung, the following is conclusive against this opinion. As the bronchia are merely passages for conducting the air into and out of the air-cells, the more the latter are capable of being expanded and contracted, the greater will be the streaming of the air through the air, bronchia, and *vice versa*. But in the healthy state, where the streaming of the air is greatest, there is no bronchial respiration at all; while, in a completely hepatised lung, where there can be no expansion or contraction of the tissue worth mentioning, and, consequently, no streaming of air through the vesicles, the vesicular respiration is loudest. The true explanation is undoubtedly that of Dr. Skoda, viz. that it is from the air in the bronchia vibrating in consonance with the respiratory sound of the larynx, trachea, and bronchi, the condition necessary for consonance being afforded by the condensed lung, as already explained under the head of bronchophony.

The bronchial respiration can be in pitch higher or lower, and in intensity weaker or stronger, than the laryngeal respiration; differences which depend upon the part of the windpipe with which the air in the bronchiæ consonates, for it does not always consonate with the larynx. These differences depend on other circumstances likewise, which it is unnecessary to detail here.

The cavernous respiration of Laennec differs in no essential particular from bronchial respiration, and cannot be taken as a diagnostic sign of a cavity, unless accompanied by the amphoric or metallic echo.

The respiratory sound, named by Laennec *respiration soufflante*, and described by him as giving rise to the sensation, when listened to, as if air was drawn from the ear of the auscultator, during inspiration, and blown into it during the expiration of the patient, is merely a strong form of bronchial respiration; and its strength depends not only upon the greater or less distance of the bronchus or cavity in which it is formed, but also upon the rapidity and amount of motion in the lungs, and the more or less perfect consonance of the parts.

Indeterminate Respiratory Sounds.—Under this term are comprehended all those respiratory sounds which cannot be referred to any of the preceding forms of respiration, or to the rattles or friction of the pleura, to be afterwards described. The respiratory murmur in the air-cells is sometimes so ill-marked, as to be indistinguishable from the respiratory sounds which spread from the deeper bronchiæ or larynx, and a weak rattle at a distance may resemble an indistinct respiratory murmur in the air-cells. As such a respiratory murmur may arise from many causes, it is impossible to say what is the cause in any given case—whether it be the entrance of the air into the air-cells; the stream of air into the larger bronchia, or a distinct rattle, or two or more of these combined. Neither the sound derived from the larger bronchia, when it is not bronchial respiration, nor the indistinct respiratory murmurs, afford grounds for forming any conclusion as to the condition of the parenchyma of the lungs. Such being the case, any subdivision of them is superfluous, and they may be all included under the name of indeterminate respiratory sounds. Although a very skilful ear may be able to detect the transition of the distinct forms of respiration into the indeterminate, yet, whenever a sound is at all doubtful, it is much better to class it among the indeterminate, and to call in the assistance of the other signs and indications in forming a diagnosis.

The Rattles.—The rattles are sounds produced in respiration by the breaking of the air through fluids, such as mucus, blood, &c. and sometimes by its passing over solid substances, such as a fold of mucous membrane, which, in consequence, may be thrown into vibration. Most of these resemble the bursting of bubbles; others are like the creaking of leather, crepitation of salt, &c.

They differ very much in the loudness and clearness with which they are heard; also in dryness and moistness, in frequency, size of the bubbles, &c.; but to describe all these circumstances, would lead into too minute details for the present object.

Division of the Rattles.—1, The vesicular rattle; 2, the consonant rattle; 3, the crackling, or dry crepitating rattle, with large bubbles (râle crépitant sec à grosses bulles ou craquement of Laennec); 4, indeterminate rattles; 5, rattles with amphoric echo.

The vesicular rattle is that produced in the air-cells and small bronchial tubes. Its peculiar character is that the bubbles are very small, and of equal size. It indicates the presence of fluid, such as mucus, blood, or serum, in the finest bronchial tubes and air-cells; and also that the latter are penetrated by the air. Its presence, therefore, shows that none of the morbid conditions which prevent the entrance of the air into the air-cells can exist.

This sound corresponds to the moist crepitation of Laennec, which he considered as pathognomonic of incipient pneumonia. Its occurrence, however, in its pure form, is rare in pneumonia; and it is likewise heard in other morbid affections, such as œdema of the lungs, tuberculosis, and even common catarrh. With the view of obviating this difficulty, Laennec divided it into crepitating and subcrepitating; but, as numerous facts, attested by Andral, Chomel, Cruveilhier, and Skoda, prove that this is not a sufficient distinction, the presence of the crepitating rattle can only be held to prove the existence from some cause or other of fluid in the air-cells, and their permeability by air; and we can only conclude that pneumonia is present, if we discover its other indications.

The consonant rattle is clear, high in pitch, and the bubbles which form it are unequal in size. Such a rattle is produced in the larger branches of the bronchia, and in the trachea; but when heard at the parietes of the chest, after having been transmitted through the lungs by conduction, it loses much of its height and clearness. If, however, the conditions for consonance are present, it is heard of an intensity and clearness equal to that at the place of its origin.

The consonant rattle is therefore diagnostic of the same state as bronchophony and bronchial respiration; but, as rattles seldom occur in exudation, it indicates in general pneumonia or tuberculous infiltration.

Laennec's dry Crepitating Rattle.—This sound, according to Laennec, resembles that made by the blowing up of a dry pig's bladder. It is held to be a pathognomonic sign of vesicular and interlobular emphysema; but it occurs only in those cases in which the cells are expanded to the size of a barleycorn or bean, and communicate with a bronchial tube. It occurs also when the bronchial tube is expanded into a sac, and in excavations of the lung, which do not commmuninate with the bronchia by too wide an opening, and have membranous walls. The cause of the appearance seems to be that the air-cells, from having lost their resilience, instead of contracting during expiration, merely collapse when the air leaves them; and, on the return of the air on inspiration, are suddenly expanded with a crackling noise.

It is doubtful, however, whether it be possible to distinguish this sound from that made by the presence of tough mucus in the air-cells and finer bronchial tubes.

Indeterminate Rattles.—Under this head are included all those rattles commonly called mucous rattles, which are not vesicular or consonant, and are not accompanied by the amphoric echo. They afford no information as to the state of the parenchyma of the lungs, and therefore indicate merely the presence of fluid in the bronchial tubes.

Amphoric Echo and Metallic Tinkling.—In speaking into an empty earthenware vessel, with a dilated body, there is heard, besides the voice, a peculiar humming sound; this represents the amphoric echo of Laennec. There is likewise heard in the vessel, but better in large spaces inclosed with solid walls, such as chambers, and especially vaults, frequently a metallic echo accompanying the voice, if somewhat loud. This is the metallic echo or tinkling.

In a tube that is not very wide, the amphoric echo is never produced.

In cases where there is a large cavity in the chest, whose walls are disposed to reflect sound, and which contains air, a similar sound occurs. As the conditions for its occurrence are, that the cavity be large and contain air, it has only been met with in cases of extensive excavations of the parenchyma of the lung, and in pneumothorax. Laennec believed that a cavity must contain air and fluid to enable it to exhibit these appearances, and his opinion has been universally adopted. But the presence of fluid is quite superfluous, as both a jar and a chamber produce the sound without their containing any; and if an inflated stomach, in which there is no fluid, be spoken against by means of a stethoscope, the amphoric echo and metallic tinkling are heard within it.

Laennec believed further that the cavern in the lung, or the cavity in the pleura, must communicate with a bronchial tube, to enable the sounds to occur. But only in the rarest cases of pneumothorax does a communication with the bronchia remain, while the amphoric and metallic sounds are an almost constant attendant of this morbid state. In the experiment with the stomach, there was no communication with the external air, and this leads us to the true explanation, which seems to be, that the air contained in one of the bronchial tubes consonates with the voice, and produces vibrations within the cavity of the pleura, or cavern in the lung, from which it must not be separated by more than a thin layer of parenchyma.

The mechanism of these sounds will be easily understood, if we keep in mind that they are merely the peculiar character given to the sounds of the voice and respiration, already described, by their being re-echoed in a space of considerable size filled with air.

The amphoric respiration, or *bourdonnement amphorique*, arises either from the respiratory sound in a large bronchial tube which opens into a cavity, or the re-echoing, in the pleura filled with air, of the bronchial or consonating respiration in a neighbouring tube.

The metallic tinkling, *tintement metallique*, may arise from bronchophony, from rattles, or from the agitation of fluid produced by coughing, or violent motion, re-echoing in a cavern, or in the pleura when filled with air. Of these, by much the most frequent cause are the rattles.

BIBLIOGRAPHICAL NOTICES.

Dunglison's Human Physiology.[1]

We can obviously neither form, nor express with propriety, any opinion of this work; but we may be permitted to extract the notice prefixed to this fourth edition.

"The great advances daily making in the knowledge of the various subjects that appertain to physiology, render the preparation of a new edition of any work, which has received the general favour of the profession, a task by no means easy. In the short period that has elapsed since the appearance of the third edition, the investigations of the physiologist have been so numerous and diversified, as to render it necessary to make many modifications and additions. The extent of these cannot be appreciated by a cursory examination. They have imposed upon the author the necessity for considerable labour. The mere reference, indeed, to the various contributions—scattered through the journals of different countries and languages, as well as contained in *ex professo* treatises—requires no little time and industry. The author has found it requisite to make the most numerous modifications and additions in the second volume.

"The subject of histogeny or the development of the tissues, although much cultivated by recent physiologists, belongs perhaps more properly to general anatomy, and on this account has not been treated of *in extenso* in the present work. It was impossible, however, to pass over the recent labours of Valentin, Bischoff, Wagner, Martin Barry, T. W. Jones, and others, without notice.

"The first part of the 'Elements of Physiology' of Dr. Rudolph Wagner, translated by Dr. Robert Willis, with notes by that gentleman and others, has furnished the author much valuable matter. He has likewise added several engravings, to elucidate either topics already touched upon in the work, or such as are new in the present edition, and has endeavoured to place it in all respects on a level with the existing state of the science.

"*Philadelphia*, *August*, 1841."

Smith's American Medical Almanac.[2]

It affords us pleasure to extract the following testimonial, in favour of this useful medical annual, from the British and Foreign Medical Review for July, 1841:—

"This is a valuable little work, which we really envy America the possession of; as since Mr. Farr discontinued his admirable almanac, we have nothing of the kind in England. Besides the usual contents of an almanac, it possesses all the requisites of a daily memorandum book, and contains many valuable statistical and medical documents."

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[1] Human Physiology: illustrated by engravings. By Robley Dunglison, M. D., Professor of the Institutes of Medicine and Medical Jurisprudence in Jefferson Medical College, Philadelphia; one of the Secretaries to the American Philosophical Society, &c. 8vo. 2 vols. pp. 579 and 651. Philad. 1841.

[2] The American Medical Almanac for 1841. By J. V. C. Smith, M. D. Vol. 3. Continued annually. 18mo. pp. 148. Boston, 1841.

Dr. Smith is preparing the almanac for 1842, and we trust that an extensive circulation may repay him for the trouble he takes to facilitate the labours of his professional brethren.

Ruschenberger's First Book of Natural History.[1]

It is now universally admitted, that a knowledge of the animal mechanism ought to form a part of common school education. Already the subject has been introduced with great advantage into certain of our schools, and it is but necessary that works like the "First Book of Natural History," should be extensively disseminated, to have it introduced into all.

The First Book of Natural History has been prepared for the use of schools and colleges, by Dr. Ruschenberger, from the text of Milne Edwards and Achille Comte, Professors of Natural History in the colleges of Henry IV. and Charlemagne. Emanating from such competent individuals, the work could not fail to be admirably adapted for the object in view, and as such, we recommend it for general adoption.

Dix on Strabismus.[2]

The surgeon will find here, addressed to his professional brethren—the only legitimate method of publication—a detail of numerous cases operated on successfully by Dr. Dix, with a short account of the new method, which has excited so much interest both in the profession and the public, and which has been laid hold of by the mercenary, and those who have but little feeling in common with their professional brethren, as a means for acquiring unenviable notoriety. It is strange that so simple an operation should not have suggested itself to the surgeon before the middle of the nineteenth century!

Medical Statistics of the U. S. Army.[3]

This is a most valuable contribution to medical statistics, for which we are indebted to the enlarged intelligence and public spirit of the officer who presides so ably over the medical department of the army. It is the commencement of an undertaking which ought not to be permitted to flag; and which must be the source of important information, not only to the service, but to the profession generally.

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[1] First Book of Natural History; prepared for the Use of Schools. By W. S. W. Ruschenberger, M. D., Surgeon in the U. S. Navy, &c. &c. 12mo. pp. 101. With plates. Philad. 1841.

[2] Treatise on Strabismus or Squinting, and the new Mode of Treatment. Illustrated by engravings and cases. By John H. Dix, M. D., Member of the Massachusetts Medical Society. 12mo. pp. 105. Boston, 1841.

[3] Statistical Report on the Sickness and Mortality in the Army of the United States. Compiled from the Records of the Surgeon-General's and Adjutant-General's offices—embracing a period of twenty years, from January, 1819, to January, 1839. Prepared under the direction of Thomas Lawson, M. D., Surgeon-General. Published for the use of the medical officers of the navy of the United States. 8vo. pp. 376. Washington, 1840.

Arnott's Elements of Physics.[1]

This valuable work has been so long before the public, and so justly appreciated by them, that it may appear a work of supererogation to speak of its sterling worth. It ought to be read by every medical student. The present edition has been carefully revised and corrected, and has been condensed into one volume. It contains all that has been prepared or published by the author.

Parker on the Stomach, and on Syphilitic Diseases.[2]

The estimate which we place on these works, has been sufficiently shown by our having reprinted them in the "Library." Both of them are well worthy of the attention of the practitioner.

MISCELLANEOUS NOTICES.

Inflation of the Bowels with Air as a Cure for Ileus.—In the number of the New York Medical Gazette for August 11, 1841, the editor has collected several cases of obstruction of the bowels, for which inflation of air was successfully practised. It is, as properly remarked in the article cited, an old remedy; yet we doubt much whether it was known to the facetious author of Gulliver's Travels; who, in satirising the wild schemes of various projectors, introduces the identical operation as a discovery of one of the sage doctors of the academy of Lagado.

"I was complaining," says Gulliver, "of a small fit of the colic, upon which my conductor led me into a room where a great physician resided, who was famous for curing that disease by contrary operations from the same instrument. He had a large pair of bellows, with a long slender muzzle of ivory; this he conveyed eight inches up the anus, and drawing in the wind, he affirmed he could make the guts as lank as a dried bladder. But when the disease was more subborn and violent, he let in the muzzle when the bellows were full of wind, which he discharged into the body of the patient; then withdrew the instrument to replenish it, clapping his thumb strongly against the orifice of the fundament; and this being repeated three or four times, the adventitious wind would rush out, bringing the noxious along with it, (like water put into a pump,) and the patient recovered. I saw him try both experiments upon a dog, but could not discern any effect from the former. After the latter, the animal was ready to burst, and made so violent a discharge as was very offensive to me and my companion. The dog died on the spot, and we left the doctor endeavouring to recover him by the same operation."

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[1] Elements of Physics; or Natural Philosophy, General and Medical, written for Universal Use, in plain or non-technical Language, and containing new Disquisitions and Practical Suggestions. Comprised in five parts:—1st, Somatology, statics, and dynamics; 2d, Mechanics; 3d, Pneumatics, hydraulics, and acoustics; 4th, Light and heat; 5th, Animal and medical physics. Complete in one volume. By Neil Arnott, M. D., of the Royal College of Physicians. A new edition, revised and corrected from the last English edition, with additions, by Isaac Hays, M. D. 8vo. pp. 520. Philad. 1841.

[2] The Stomach in its Morbid States; and the Modern Treatment of Syphilitic Diseases. By Langston Parker, M. D., Member of the Royal College of Surgeons, &c. Both works complete in one volume. 8vo. Philad, 1841.

The ingenuity of Swift suggested to him, what he conceived to be a ridiculous operation; but it appears to have been successful, and is not unphilosophical; and therefore in a very different category from the other recorded inventions of the academicians of Lagado—as that of extracting sunbeams out of cucumbers; of reducing human excrement to its original food; of calcining ice into gunpowder, &c.; amongst which it is placed.

Lusus Naturæ.—We have been pleased to receive from the venerable and estimable Dr. Chatard, of Baltimore, a communication suggested by the case of Lusus Naturæ published in our last number, by Dr. Thruston. Dr. Chatard states, that in the year 1789 he saw in Paris, a case that greatly resembled the one in this Journal, except that the monster had two heads and two chests, and sucked both breasts of the mother at the same time, appearing to be in good health. It died at the age of four months.

Dr. Chatard refers in his letter to a case of monstrosity, communicated to him by Dr. Villeneuve, of the Académie Royale de Médecine of Paris, in the year 1831. In this case, two fœtuses were united by the crowns of the heads. They measured nineteen inches from heel to heel, making nine inches and a half for each. They were delivered naturally. The placenta was single, with two umbilical cords were attached to it. They died in the birth.

Dr. Chatard adds, that he has, in his collection of *cas rares*, two fœtuses united like the Siamese, except that they are joined from the upper third of the chest to the pubes, and, consequently, have one abdomen in common. They were aborted at three months.

Medical Department of Kemper College, St. Louis, Mo.—The present faculty of this college is constituted as follows:—John De Wolf, M. D., Professor of Chemistry and Pharmacy; John S. Moore, M. D., Professor of Theory and Practice, and the Institutes of Medicine; Richard F. Barrett, M. D., Professor of Materia Medica and Medical Botany; William Carr Lane, M. D., Professor of Obstetrics and Diseases of Women and Children; and Joseph N. M'Dowell, M. D., Professor of Anatomy and Surgery.

The annual circular contains the names of forty students, who attended during the last session.

Auzoux's Preparations of Artificial Anatomy.—These beautiful and ingenious contrivances, for exhibiting the anatomy of the human body as well as it can be done artificially, can be had by application to Henry Rawls & Co., No. 57 State street, Albany, who have been constituted agents for the same, and who are prepared to receive orders for them at the manufacturer's prices, to which will be added the expenses of importation, and 10 per cent. commission. All orders are executed within sixty or ninety days.

Albany Medical College—Professor T. R. Beck.—We are glad to see that Dr. Beck's talents as a teacher are not to remain fallow. He has been recently appointed Professor of Materia Medica in the Albany Medical College. He has likewise been chosen Secretary of the Board of Regents of the University of the State of New York.

Medical College of Ohio.—Professor Harrison, of Cincinnati, has been elected to the chair of Materia Medica in the Medical College of Ohio, in the place of Dr. Oliver, who resigned after one year's service.

Philadelphia Hospital.—William H. Gillingham, M. D., has been elected one of the attending physicians of the Lying-in-Department of the Philadelphia Almshouse and Hospital, in the place of Professor James M'Clintock, resigned.

University of Maryland.—Dr. Samuel Chew, of Baltimore, has been appointed to the chair of Materia Medica in the University of Maryland—vacant by the death of Dr. Samuel C. Baker. Dr. Chew is, to our knowledge, a talented and well read physician.

Asylum for the Insane of the Commonwealth of Pennsylvania.—The legislature, at the last session, passed a law for the establishment of a State Asylum or Hospital for the Insane Poor. The appointment of commissioners for the erection of the building, and trustees for the management of the institution, was vested in the governor, who has appointed the following gentlemen:—

Commissioners.—John K. Kane, George Rundle, John W. Ashmead.

Trustees.—For one year.—Richard Rush, Dr. George M'Clellan, John White.

For two years.—Isaac Collins, Michael W. Ash, C. Wallace Brooke.

For three years.—Jacob Lex, Dr. Robley Dunglison, James Campbell.

The Bill, for the passing of which we have strenuously laboured for the last few years, is as follows:—

AN ACT TO ESTABLISH AN ASYLUM FOR THE INSANE OF THIS COMMONWEALTH.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assemby met, and it is hereby enacted by the authority of the same,* That there shall be erected, as soon as conveniently may be, upon some suitable site to be determined and obtained as is hereinafter provided, a public asylum for the reception and relief of the insane of this commonwealth.

SEC. 2. That three suitable persons shall be appointed and commissioned by the governor to select and purchase a site for said asylum, and to contract for and superintend the building thereof. *Provided,* That the persons so appointed shall receive no compensation for their services, but their necessary expenses to be paid in the manner hereinafter prescribed.

SEC. 3. That the site and necessary grounds for said asylum shall not cost more than ten thousand dollars, and the building shall be planned and arranged for the accommodation of three hundred patients and the necessary officers, and with reference to the future enlargement of the same.

Sec. 4. That the governor be and is hereby authorised to borrow, on the credit of the commonwealth, at such times and in such sums as may be required by the provisions of this act, the sum of one hundred and twenty thousand dollars, at a rate of interest not exceeding six per cent. per annum. The said loan shall be styled the loan for the Pennsylvania Insane Asylum, and shall be reimbursable at any time after the expiration of five years—shall be transferable as other loans of this commonwealth are, and the interest thereof shall be payable semi-annually. And from the avails of the loan, the said commissioners shall have authority to draw on the treasurer of the commonwealth for a sum not exceeding forty thousand dollars on the first day of January, eighteen hundred and forty-two, and for the like sum on the first day of January, eighteen hundred and forty-three, and for the like sum on the first day of January, eighteen hundred and forty-four; and said commissioners shall, on or before the first day of October, eighteen hundred and forty-two, eighteen hundred and forty-three, and eighteen hundred and forty-four, respectively, render to the proper accounting officer of the commonwealth an exact account of all the contracts, expenses, and liabilities, which they have incurred or authorised in the execution of their commission, with vouchers for the same; and in case of their failure to do this, their authority to draw, as aforesaid, shall thereupon cease and become extinct; and said commissioners shall so build, finish, and furnish said asylum, that the whole expense of land, buildings, and furniture, with suitable apparatus for heating the rooms, for cooking, and for furnishing water for all the uses of the establishment, to accommodate three hundred patients and the necessary officers and attendants, shall not exceed one hundred and twenty thousand dollars. *Provided,* That the commissioners appointed by this act, before entering upon their duties, shall give bond with such security as may be required by the executive for the faithful application of the proceeds.

Sec. 5. That the interest of said loan shall be refunded to the commonwealth semi-annually, out of the receipts of the asylum.

Sec. 6. That the government of said asylum shall be vested in nine trustees, to be appointed by the governor, who shall serve without compensation; of those first appointed, three shall serve for one year, three for two years, and three for three years, and at the expiration of the respective periods, the vacancies to be filled by appointments for three years; and should any vacancy occur by the death, resignation, or otherwise of any trustee, such vacancy shall be filled by an appointment for the unexpired time of such trustee; the said trustees shall have charge of the general interests of the institution—they shall appoint the superintendent, who shall be a skilful physician, and shall always reside at the asylum, and they shall make such by-laws and regulations as they may think necessary; they shall also appoint a treasurer, who shall be approved by the governor, and give sufficient bonds to the commonwealth for the faithful discharge of his duties, and they shall appoint such other officers and assistants, and fix upon the compensation for their services, as may be necessary for the efficient and economical administration of the affairs of the institution. Said trustees shall have power to take and hold in trust, for the use and benefit of said asylum, any grant or demise of land, and any donation or bequest of money or other personal property, to be applied to the maintenance of insane persons in, or to the general use of, the asylum.

Sec. 7. That in the month of January, annually, the trustees shall cause to be laid before the legislature, a full account of the condition of the institution during the preceding year, and of the receipts and disbursements, both of which reports shall be made up to the end of the year preceding.

Sec. 8. That the proper courts of this commonwealth shall have power to commit to said asylum any person who, having been charged with an offence punishable by imprisonment or death, shall have been declared by the verdict of a jury or otherwise, to the satisfaction of the court, to have been insane at the time the offence was committed, and who still continues insane.

SEC. 9. That if any person shall apply to any court of record within this commonwealth, having final jurisdiction of offences which are punishable by imprisonment for the term of ninety days or longer, for the commitment to said asylum of any insane person within the county in which such court has jurisdiction, it shall be the duty of said court to inquire into the fact of insanity; and if such court shall be satisfied that such person is by reason of insanity unsafe to be at large, or is suffering any unnecessary duresse or hardship, such court shall, on the application aforesaid, commit such insane person to said asylum.

SEC. 10. That it shall be the duty of the court, in all cases where they shall commit any person to the asylum, to certify to the trustees the legal settlement of such person, if he or she shall have any legal settlement within this commonwealth; and if such person shall have no such settlement, then to certify the place of residence of such person at the time of offence committed or application made, and the poor district so certified to be the place of settlement or residence of such person, shall be chargeable with the expenses of his or her care and maintenance, and removal to and from the asylum. *Provided*, That the settlement or residence of any such person shall not be so certified, until after due notice shall have been given to the constituted authorities having charge of the poor in the district, to be charged thereby.

SEC. 11. The several constituted authorities having care and charge of the poor in the respective counties, districts, and townships of this commonwealth, shall have authority to send to the asylum such insane paupers under their charge as they may deem suitable subjects for its treatment, and they shall be severally chargeable with the expenses of the care and maintenance, and removal to and from the asylum of such paupers.

SEC. 12. That in the admission of paupers to said asylum, precedence shall always be given by the trustees to cases in which the disease is of recent origin; and if the trustees shall in any case deem it for the interest of the asylum, or of the patient, that he or she should be removed, the superintendent shall give notice to those who are responsible for his or her support, and if he or she shall not be removed within thirty days after such notice, the trustees may cause him or her to be removed, at the expense of the person or persons, body corporate or politic, who may be liable for his or her support.

SEC. 13. If the guardians, directors, or overseers of the poor, to whom any patient who shall be in the asylum is chargeable, shall neglect or refuse, upon demand made, to pay the trustees the expense of the care, maintenance, and removal of such patient, and also of the burying such patient, if he or shall die in the said asylum, it shall be the duty of the court of quarter sessions of the county in which such patient was certified to be settled or to have resided, or from which he was removed to the asylum, by any of the constituted authorities therein having care and charge of the poor, upon complaint to the said court made by the said trustees to compel payment by said guardians, directors, or overseers, of all such expenses in the manner directed by law in the case of a judgment against overseers.

SEC. 14. The governor, judges of the several courts of record in this commonwealth, the members of the legislature, and the grand jury of the county in which the same may be located, shall be ex-officio visiters of the institution.

WM. A. CRABB,
Speaker of the House of Representatives.
CHARLES B. PENROSE,
Speaker of the Senate.

Approved this fourth day of March, A. D. eighteen hundred and forty-one.
DAVID R. PORTER.

A few Hints addressed to Medical Students about to Visit the Parisian Hospitals. By a Physician.—These hints, (says the editor of the Medico-Chirurgical Review,[1]) are mostly worth having. We shall take one or two of them. And first a hint on *lodgings* and *eating*.

It is a matter of experience known to all the medical men of Paris, that a large proportion of the medical students are attacked with fever within a very short period of commencing their studies. Now, though this may be accounted for in many ways, and may arise from various causes, yet it is generally allowed that the situation selected for their lodgings is of itself sufficient to be an exciting cause of disease. A more unhealthy situation than some of those small and narrow streets and alleys that abound near the Ecole de Médecine cannot be conceived. In these parts the medical students chiefly reside, for the sake of convenience and economy; here they congregate together in the miserable *maisons garnies*, living, as they occasionally do, two or three in one apartment. The cheap restaurants, or eating-houses, that also here abound, only add to the general wretchedness of the scene, wherein, under the semblance of comfort and economy, the student is offered his *dejeuner à la fourchette* for sixteen sous, and his dinner *de quatre plats* for twenty-two sous. To many, this may appear of little importance, and to be little connected with the subject under consideration; but reason and experience will draw a different conclusion. Is it possible that the body, accustomed to nutritious and healthy food, to all the comforts of English living, to fresh and wholesome atmosphere, can meet with so sudden and so great a change as this, and not be affected by it? What quarter, then, of Paris is to be selected by the student? If the faubourg St. Germain side of the Seine must be chosen, from its contiguity to the hospitals, the rue de Seine St. Germain, or the rue de Sts. Pères, affords a far more healthy and open situation than the localities previously mentioned. True it is, that apartments may be somewhat more expensive, yet surely it is far preferable to sacrifice a small sum of money for the sake of health, than to run the risk of becoming the victim of low typhoid fever The Tuilleries side of the water is colonised to a great extent by the English, and is certainly preferable to the faubourg St. Germain. Here lodgings are to be had tolerably cheap, but depend much on situation. In the faubourg du Roule, the continuation of the faubourg St. Honoré, lodging may be procured at a moderate price, and the situation is very healthy, but it is some distance from Hôtel Dieu, La Charité, La Pitié, &c. It is, however, contiguous to the Hôpital Beaujon, to which M. Louis has lately been appointed, during the alterations that are taking place at Hôtel Dieu. Again, with regard to meals: one wholesome dish in a respectable restaurant's, is far better than four offered for the same money in many of the cheap eating-houses. For two francs, a good dinner may be procured, and a déjeuner or breakfast for thirty sous, in many a clean and wholesome restaurant's. The great difference that exists between French and English living, must more or less affect every constitution, however strong it may be. It is scarcely possible to conceive of two greater extremes. In Paris, there are a set of small hotels which profess to give English dinners. These are generally as dear as they are bad; but one or two are to be found in the neighbourhood of the Boulevards des Italiens, where, at times, a tolerable English dinner is to be met with: in these, as must of necessity happen in places of like description, the company is not of the most select order; but if this can be dispensed with, it is certainly worth the while of those who are suffering from the dyspepsia of Parisian cookery to try for a time the change.

Walking the Hospitals should not be entered upon for the first three weeks after the arrival of the student in Paris. The atmosphere of Paris is very peculiar, and this is exemplified in the numerous patients that enter its hospitals, the victims of its effects on the constitution. It is a question that is asked of every patient, how long has he been in Paris? The first month is the most trying period; before, then, the student commences his labours, he should, to a certain extent, have become habituated to the change of air; his constitution should have time to accustom itself to the peculiarities of difference.

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[1] July, 1841, p. 174.

What Hospitals are worth attending?—Of the Parisian hospitals, there are none that offer such a concentration of medical skill as La Charité. This is situated in the rue des Sts. Pères, and contains between five and six hundred patients. MM. Andral, Cruveilhier, Velpeau, Rayer, Bouillaud, Fouquier, are all to be found within its wards.

He who would learn accurate diagnosis, who would study the use of the stethoscope in its mean, and not in its extreme; he who would learn pathology, by close attendance to the dead house, should follow the service of M. Andral. There are few so free from that national error, excitement, as this celebrated man.

No hospital is better known to us by name than Hôtel Dieu. It was the largest in Paris, containing at one time twelve hundred beds; but its size is much diminished, owing to the improvements which are being made in its immediate vicinity, which have rendered it necessary to pull down one of its largest wings.

Of the surgeons attached to this hospital, are men whose names are familiar to all in the profession, as MM. Roux and Breschet. The former makes his daily visit, at half past six in the summer, and at seven in the winter months, and this is followed by his clinical lecture in the amphitheatre of the hospital. M. Breschet commences his rounds at nine o'clock.

There are no less than ten physicians attached to this hospital. Amongst the most celebrated are Chomel, Magendie, and Louis. M. Chomel lectures from nine to ten on Mondays, Tuesdays, and Fridays.

Another hospital that is generally visited by foreigners, is the Hôpital St. Louis, in which an opportunity is particularly afforded of studying diseases of the skin. It is situated within five minutes' walk of the rue du faubourg St. Martin. One of the streets leading out of this, called the rue des Recollets, will be found the direct way to this hospital, which is situated in the rue de l'Hôpital, directly in front of the canal that is at the end of the rue des Recollets. Here it was that Alibert and Biett collected their vast mass of information, and were to be found morning after morning in the midst of their squalid band of patients. But now no more remains of them than a dirty marble bust of the former—soiled by the hands of the numerous patients that mount the staircase where it is placed—to mark the haunt of this once celebrated man. Time makes sad changes in our profession, as in every other, and to this the Hôpital St. Louis bears ample testimony. MM. Lugol and Emery are the only remains of the former days of St. Louis.

M. Lugol is, in every sense of the term, a great man. He styles himself "Le grand lustre du monde." It is curious to follow him in his scrofulous wards, and there hear him descant on the miraculous powers of iodine.

Near to the Hôpital des Veneriens is the Maison d'Accouchement, or Hospice de la Maternité. There is much difficulty in gaining admission here, as no medical man has a right within its wards, excepting those that are officially attached to it. There are between four and five hundred beds within it.

The Hospice de la Salpêtrière is an establishment on a very large scale. It contains between five and six thousand beds, entirely for women. Of these, a certain number are appropriated to old and infirm persons, others are set apart for patients labouring under incurable diseases. Here it was that M. Cruveilhier compiled his admirable work on pathological anatomy, the dead-house affording no small supply of diseases, in their most hideous forms. A certain portion of this establishment is allotted to those who are of unsound mind, their number varying from a thousand to twelve hundred.

The Bicêtre is for men what the Salpêtrière is for women.

Parisian Dissecting-Rooms versus the English.—True it is that subjects for dissection are far more numerous than those in England. In this point there is certainly a superiority. When, however, the accommodations that are provided in the Parisian dissecting-rooms are taken into consideration, the preference will be given to those of our own country. Let the student who has been accustomed to the dissecting-rooms in England enter those in Paris: the stench which first assails his nasal organs is almost insupportable, from the system of smoking which is carried on within them. Again, there is nothing like deceney or order kept up; portions of viscera, detached limbs, pieces of dissected muscle, fat, and cellular membrane, are seen to cover the floor. It is necessary to be careful how we tread, lest we should stumble against some limb lying in our way, or slip up, from stepping on some viscid substance that may be strewed upon the ground.

There are two great dissecting schools in Paris. One is close to the Ecole de Médecine, and adjoins Dupuytren's Museum of Morbid Anatomy; the other is situated near the hospital of La Pitié, and is called Clamart. This is one of a more modern date than the former, to which it is thought preferable. It is certainly situated in a more airy neighbourhood, and its accommodations are somewhat of a better order. It is necessary for all those who intend to dissect, to become pupils of the Internes, who have the choice of all subjects brought for dissection. Each interne has four pupils, who are attached to one subject, that is usually changed every ten days or a fortnight. The sum for the season, which lasts about five months, is about one hundred and fifty francs, or six pounds. To those who would be free from the inconveniences of the common dissecting-rooms, a means is offered of dissecting in private, by becoming the pupils of the overseer of the school, who has private rooms set apart for this purpose. He of course demands a sum of money in proportion to the convenience offered, and this more especially of the English, who are always supposed to have a superabundance of money, wherewith they can afford to pay handsomely.

Case of Secretion of Air from the Human Skin.[1] *By Sir Francis Smith.*—(*The Dublin Journal of Medical Science, January*, 1841.)—An hypochondriac gentleman, thirty-five years of age, informed Sir F. Smith that he was liable to immense disengagements of gas from the stomach; that he also occasionally discharged air from the urinary bladder; and had observed an escape of air from the surface of his body when under water in the bath. Little attention was paid to the last of these statements till the 15th of May, 1840, when Sir F. Smith was hastily summoned to the bath to see the phenomenon of the disengagement of air from the skin of his patient. He was found in a bath at 79°, and his chest, abdomen, shoulders, and hands, were literally covered with small air bubbles. When he removed his hands from the bath, the bubbles disappeared; but when he replaced them below the water, the air bubbles were observed to make their reappearance, at first very minute, but gradually increased in size till the palms of his hands became again coated with them. He frequently wiped away the bubbles from his hands and chest, but in every case they were soon replaced by others. The bubbles of air ran together, when pushed with the finger, like globules of mercury, without quitting the skin, or becoming loose in the water. This circumstance was observed for twenty minutes by Sir F. Smith; and towards the end of that time, the margins of the upper end of the bath, opposite where the shoulders had been, were coated all round, for the depth of about two inches, with minute bubbles of air.

[1] **Edinburgh Medical and Surgical Journal, July, 1841, p. 289.**

On the non-occurrence of Albuminous Urine during the Dropsy which follows Scarlatina.[1] *By Dr. Philipp, of Berlin.—(Casper's Wochenschrift fur die Gesammte Heilkunde, Nov.* 1840.)—The results of Dr. Philipp regarding the occurrence of albuminous urine during the dropsical symptoms which follow scarlatina, are at variance with what have been observed in this country. In an epidemic scarlatina which raged at Berlin, he ascertained in sixty cases that the urine was not albuminous, though the dropsical symptoms were fully developed, and could only be traced to this complaint. The dropsical symptoms appeared at shorter or longer intervals; often four or five weeks after desquamation. The urine was tested both by means of heat and of nitric acid, but by neither of these was the slightest trace of albumen discovered. He is inclined to attribute this to the rarity of disease of the kidney at Berlin, seeing that for the last two years only two cases of Bright's disease of the kidney have been noticed. The scarlet fever, too, appears to vary somewhat in its type from that which occurs in this country, as he mentions that the deaths from this affection generally result from its complication with croup, as he calls it, or cerebral disorder. Dr. Philipp mentions that the dropsical symptoms are so mild and unattended with danger, that, though they occur in most cases, he has not met with one which proved fatal.

On the prevention of Pitting in Small-pox by means of Sulphate Ointment.[2] *By Dr. V. Midaveine.—(Annales de la Societé de Medecine de Gand, December,* 1840.)—The danger of applying mercurial preparations to the whole surface of the body, induced Dr. Midaveine to seek some other means which would be more generally applicable, and yet possess an equally modifying power over the variolous pustule. From the success he obtained in sixteen cases of small-pox, he thinks he has found in sulphur ointment a remedy equally efficacious in preventing the maturation of the pustule, and the subsequent pitting, as the mercurial preparations, whilst its application is not attended with the same danger to the patient. He employed it of the strength of one and a half to two drams of flowers of sulphur to each ounce of lard, the smaller proportion being used for the varioloid affection, the larger for the confluent small-pox. The whole body is rubbed with this three times daily; and the sooner the application is made after the appearance of the eruption, the greater is the chance of its speedily arresting its development. The pustules shrivel and dry up under this treatment, the appetite speedily returns, and convalescence is soon established.

Facts relative to the Statistics of Menstruation.[3] *By Dr. Adelmann, of Fulda.—(Neue Zeitschrift fur Geburtskunde, August,* 1840.)—During the years 1834, 35, and 36, Dr. Adelmann ascertained the period at which menstruation had commenced in five hundred and seven individuals. From this it appeared that in girls with black hair, the average age at which menstruation commenced was 16; in girls with brown hair, the average age was 17; and in girls with fair hair, between 16 and 17. The average duration of each menstrual period, four to five days for the black-haired girls, and three to four days for the brown and fair-haired. Only one in one hundred and two cases was met with who menstruated regularly at the interval of three weeks; all the rest did so at regular periods of four weeks.

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[1] Edinburgh Medical and Surgical Journal, July, 1841, p. 290.
[2] Ibid, p. 292.
[3] Ibid, p. 298.

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Art. I.—NOTES ON THE TREATMENT OF CHRONIC PLEURISY, WITH EFFUSION.[1]

BY THE LATE JAMES HOPE, M. D.

The following paper must possess a high interest for our readers, when we inform them that it was commenced by Dr. Hope during his last illness, and concluded on his death bed. Unable to complete it as he could have wished, he was compelled to dictate it in the shape of notes, which he finished only four days before his decease. To those who knew Dr. Hope well, this zeal for science and his fellow-creatures will occasion no surprise. It was consistent with the character of the man, who died as he had lived, an accomplished physician and a good man.

The symptoms of chronic pleurisy, with effusion more or less filling one side of the chest, are perfectly well described by systematic authors, as Dr. Law, (Cyclop. Pract. Med. p. 395 *a.*) yet there is no class of affections more habitually overlooked by the bulk of the profession than this—certainly one of the most destructive to life if neglected beyond a certain period. I am glad to notice that Dr. Stokes makes a similar remark. Some fault attaches indeed to the systematic writers alluded to, for their mistaking the state of anæmia, with its quick pulse, for irritative fever, by which they not only mislead themselves, but also their readers, as to the nature of the patient's condition, and, consequently, as to the appropriate means of cure. It has resulted from this, that a far too unfavourable impression of the curability of chronic pleurisy with effusion, or empyæma, as it is called after a certain time, has become prevalent. Dr. Law thinks more favourably of the possibility of cure. He with justice, however, excepts tubercular cases, and those in which the patient is not assisted; yet I think that he is mistaken in supposing that a copious evacuation from some other organ may not occasionally prove critical, and empty a chest. A case occurred to me in which absorption did not commence so soon as I expected; namely, within a week, when the patient was attacked with hypercatharsis to the amount of sixty watery evacuations in two days. The chest, meanwhile, which was dull within two inches of the left clavicle, and had the heart protruded to the right side of the sternum, had completely emptied itself, and the patient recovered.

Broussais met with only one favourable case out of eighteen. Laennec's view was equally gloomy, and Dr. Townsend's is no less so; Dr. Thomas

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[1] Medico-Chirurgical Review, July, 1841, p. 295.

Davies feels the same so strongly, that he hurries on the operation of paracentesis at a very early period of the disease—a circumstance which is the main cause of the unusual success of the operation in his hands. From this aggregate of unfavourable opinions it results that, at the present time, there is a prevalent doubt whether the fluid of empyæma is ever absorbed. This fluid, it may be remarked in passing, may be either sero-fibrinous and albuminous, or contain pus in any degree up to its pure condition. This seems to be now a settled question, and I think it ought to be so, as the fluid, in healthy subjects, kills not by its quality, but by suffocating.

I cannot feel surprised at this want of success in the cure of empyæma, when I notice the unsettled, vacillating, inadequate treatment recommended even by those writers who think most favourably of the possibility of a cure.

Dr. Law's treatment comes nearest to that which I have found effectual, but he is too timid in continuing the gentle use of mercury, from fear of its inducing irritative fever and hectic. This supposed irritative fever, however, is, in most cases, nothing more than excitement of anæmia, (a fact of which he does not seem to be at all aware, as even in the convalescent period he does not even name iron as a remedy,) and the hectic is a necessary consequence when the fluid is pus, and this is diffused through the whole circulation by the process of absorption. I have steadily continued the gentle external use of mercury through the most violent hectic, coming on twice a day in tremendous paroxysms; while I have counteracted this by the free use of mineral acids; and by a diet, not only of strong broth at luncheon, but of animal food at dinner—the patient's tongue being clean, and his appetite and digestion always good.

Dr. Townsend seems principally to follow Broussais (phlegmasie chronique) and Laennec, neither of whom make use of mercury, and the former would only venture on a blister as an experiment! He likewise falls into their great error of mistaking anæmia for fever, and therefore starves the patient at a moment when there is a great demand for animal nutriment in any way in which it can be borne. The treatment of Dr. Thomas Davies is that of calomel and opium, and counter-irritants in the first stage, but he thinks these inefficient in the stage of chronic effusion. He therefore, as already stated, hurries on the operation of empyæma. The writer on pleurisy in the Library of Practical Medicine (Vol. III. p. 124) seems to have but an indifferent opinion of the curability of chronic pleurisy with effusion. After the third week or so, he thinks mercury of little benefit, and that it is even injurious when the hectic stage comes on; but approves of counter-irritants, and follows Dr. Stokes in his approbation of the use of the hydriodate of potass, to act both as an alterative and a diuretic; also of the iodide of iron.

Dr. Stokes, whose writings on pleurisy I had not the pleasure of seeing till long after I commenced my own observations, I find to be far the most successful in his treatment of chronic pleurisy and empyæma. In an excellent chapter, containing a considerable portion of original matter—some, perhaps, a little fanciful—he mentions that he cured twenty cases running by the use of a pint daily of cold solution of Lugol's iodine, and from a quarter to half an ounce of the ointment rubbed into the side. He is likewise very favourable to the use of blisters.

I have myself been instrumental in curing five and thirty cases consecutively, during the space of four years, but principally two years and a half, while I was assistant-physician to St. George's Hospital, no cases having been withdrawn, or added from an anterior date, except three; the 1st was Mr. Garnett, whom I saw about 1833, who had also fatal ulceration of the bowels; the 2d, the Rev. Mr. ——, whom I saw about 1833; the 3d an out-patient of St. George's, whom I found to have tubercular disorganisation of the lungs, and whom I, therefore, transferred to Dr. M'Leod, as an in-patient of St. George's. Paracentesis was practised; the tubercles were found; and he died from inexpansion of the lung, which was bound down to the spine.

The remainder of the cases all dated within three months, as well as I could make out by most carefully catechising the patient respecting the first feeling of pleuritic pain, or ailment of any kind. The pain was frequently forgotten, until the patient was perhaps asked whether he had not had a little lumbago, pain in the back, &c. Nor is this surprising; for copious effusion very soon relieves pleuritic pain. A very great proportion dated within two months, and from that time down to three weeks or a month. I seldom saw them earlier than a month, as they were either neglected and misunderstood cases amongst the out-patients of St. George's, or private patients whom I was called to see in consultation at a late period of the disease; the complaint of the latter having, with few exceptions, been also overlooked.

The following is a list of the previous duration of the disease in all my private cases, amounting to seventeen; but I lament to say that I cannot at present give the dates of those, eighteen in number, who were out-patients of St. George's, and the notes of whose cases I drafted out of 15,000 notes of cases, which I saw at St. George's (for I took notes of almost all). The notes of these eighteen cases having been separated from the others, I have unfortunately mislaid them. Unless, therefore, I recover them, I must trust to the confidence of the public for the accuracy of the facts. They were all demonstrated, as they occurred, to the students of St. George's.

Coachman of Sir Clifford Constable's, ill a fortnight, but previous bronchitis.

Miss Caldow, ill from two to three weeks.

Robert Watts, ill eighteen days.

Mr. Smith, ill three weeks.

Mr. Tapson, ill a month.

Patrick Millerick, ill a month.

Mr. Eade, ill five weeks.

Mr. Garnett, ill six weeks.

Henry Wade, ill two months.

Mr. Downing, ill two months.

Aldersgate street student, under Mr. ——, for supposed phthisis—had supposed lumbago nine weeks before.

Miss Miller, disease of ten weeks' standing for two months.

The Rev. Mr. Barter, two months and a half, but previous pneumonia.

Mr. Hamilton, ill three months.

Eliza Gray, ill three months.

Mr. Morgan, stitch in back three months before. Ill ever since.

The Rev. Mr. ——? ill upwards of three months.

As I have not leisure to continue this paper at present, I subjoin the following memoranda of how I shall proceed, if time permit.[1]

The private cases being in great detail, and in general features greatly resembling each other, it would be useless to give the whole in full. Therefore pick out a few which give at length, as general types—for instance, Miss Miller, Mr. Morgan, and Sir Clifford Constable's coachman—the remainder insert in an abbreviated form, together with such of the out-patients of St. George's as I can recall to memory, though I have lost the notes of their cases.—Show that I used mercury in all degrees of intensity, so as to ascertain what quantity was the most effectual, but, at the same time, least injurious.—Show that I always used opium, in full proportion, with the mercury, and that I used the milder and the external forms when the others could not be borne—thus taking *especial* care to protect the mucous membranes.—Add that I found prompt and free salivation by calomel and opium, and the use of one or two drams of ointment on each groin and axilla night and morning for forty-eight hours, (in conjunction with the other remedies presently to be specified,) produce the most rapid and satisfactory effects of absorption, in cases where the dyspnœa and faintness seemed to me most urgent and dangerous. It was quite common, and, in fact, occurred in the majority of cases, that the fluid descended one third, and still oftener one half, down the chest, within the space of forty-eight to sixty hours, carrying with it the extreme dyspnœa and faintness, to the great relief of the patient.

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[1] It will be observed that, from this point, the form of private notes is adopted.

Say that blisters were used from the first, and that the following became my settled plan of managing them. One blister six inches long and three and a half broad, exclusive of margin, was placed longitudinally over, and a little to the outside of the angles of the ribs, leaving space for another of similar size between the first and the spine. Great care was taken not to remove the cuticle, (one means of which was to cover the surface of the blister with silver paper,) as this forms by far the quickest healing plaster; but after about forty-eight hours, during which the running was absorbed by dry napkins, carefully prevented from adhering, it became requisite to cover the whole with the mildest soap-plaster, spread on soft calico, to prevent the cuticle from being accidentally abraded. In this way all irritation promptly subsided, that is, in the course of from two to three days, and the patient was ready for the second blister, which was placed between the first and the spine. It was similarly treated; and, at an equal interval, a third was placed in front of the original one; that is, rather forward in the axilla. When pain indicated the possibility of a pleuritic stitch in any part of the side, it is needless to say that the first blister was placed over that.—Say that diuretics are conjoined: viz. squill; sp. æth. nit.; juniper; iodide of potassium, and, when there is no irritation of the mucous membrane, the various other preparations of potass. Digitalis, by creating faintness, is apt to confuse the symptoms; I do not, therefore, use it till later. When all these remedies had failed for two or three days, and dyspnœa continued as urgent as ever, I have occasionally used a powerful hydragogue, as half a grain to a grain of elaterium, combined with calomel and capsicum to prevent nausea; or the pulv. jalap comp. ʒj.; so as to produce ten or twelve copious watery evacuations per day, stimulants being at hand in case of any sinking tendency. The effect of this has on several occasions been perfectly satisfactory, absorption in the chest having now made rapid progress. I derived this idea from a case already alluded to, in which a patient had an accidental hypercatharsis to the amount of sixty stools in two days, which emptied the chest in the same space of time. The patient is better in bed, both because it favours gentle transpiration, and obviates faintness.

Remind that, hitherto, I have been treating a case in which the dyspnœa seemed eminently dangerous, and the most vigorous use of remedies consequently indispensable; but now explain that inconvenience sometimes resulted from hypersalivation; for, notwithstanding an immediate suspension of the mercury either on the first appearance of tenderness of the gums, or of amelioration of the symptoms—especially the dyspnœa and obvious commencement of absorption—untoward salivation would occasionally occur, and greatly retard the convalescence. Explain that, on several times observing this, and having reason to believe that the patient could bear the dyspnœa with safety for some hours longer, provided he were prevented from rising, which creates faintness, (case of Mr. Smith, barrister,) I used more moderate quantities of mercury, being content to affect the gums within three or four days. In this way, the action of the remedy was easily controlled, either by omitting the mercury for two or three days, if its action threatened to be considerable, or by merely diminishing it according to the evidence of the mouth and of the symptoms. I found, however, that it did not answer to suspend it altogether, but that a continuation of it daily in a mild form, as a blue pill night and morning, or at night only, for the purpose of maintaining the first impression for a period of two or three weeks, or, in short, until all the disagreeable symptoms had disappeared—was attended with far better success. Explain, further, that the great acceleration of pulse, which rises commonly to 120 or 130, and in young persons even to 150 or 160, and which is attended with what the patient calls "internal fever," thirst, craving for cold drinks, and dryness and heat of skin, is not necessarily a result of fever, but it *is* necessarily a result of anæmia, occasioned by the deficiency of oxygenation from the total incapacity of one lung at least. Here was the error made by Broussais, who supposed this to be fever, and put his patient on the lowest diet. On the contrary, acting on the opposite principle, I always supply my patients with at least one or two pints of concentrated beef tea, or plain ox-tail soup; and if the state of the tongue and the alimentary canal fully authorises it, I permit them tender old mutton or beef for dinner. On this treatment, the pulse and "internal fever" rapidly fall in proportion as the anæmia disappears.

Next proceed to those cases in which hectic is established, resulting for the most part, I should imagine, from the fluids being of a puriform character—for after a month or six weeks, and sometimes much earlier, if the inflammation have been very intense, it assumes this character. Allude to the opinion pretty prevalent that mercury is injurious in such cases, and say that I have not found it so, but that its use was still indispensable: for I have noticed that where it has been omitted, contrary to my wishes and instructions, a recurrence of the effusion has taken place, notwithstanding the use of mineral acids and the various other remedies usually considered available against hectic; whereas, on resuming mercury with opium, and giving the mineral acids for hectic, I have been enabled to restore matters to their former condition, though not without an extra shake to the patient. One of the best instances of this was presented by Sir Clifford Constable's coachman. Dwell on this case; say that, after acute pleurisy of three weeks I saw him, and the chest was emptied in a week, but the mercury ordered to be continued. This, on my taking my leave, was omitted; and as he seemed weak, (viz. merely from anæmia,) he was ordered ammonia, brandy, and other stimulants. In ten days, when I was again called in, his chest had refilled, and he now had a most violent hectic paroxysm at eleven o'clock, A. M., and again at 11 P. M. Each of these thoroughly drenched him, and during the extreme heat the pulse would rise to 150, being also barely perceptible. In this, I saw nothing but a large quantity of pus in the circulation, which nature was endeavouring to throw off in her usual manner. I believed, in short, that the fluid in the chest was wholly purulent. I therefore continued the mercury and blisters in moderation, and made free use of the mineral acids, which, fortunately, he bore perfectly well. During the brief intervals of the hectic paroxysms, he exhibited that marked relief which we habitually see, and had always a keen appetite for his meals. He accordingly took as much mutton-chop, beef-steak, or roast or boiled mutton, as he was inclined to take. Under this treatment, the chest was again emptied within the space of ten days; the hectic symptoms slowly gave way during a period of a month or six weeks, and I dismissed him convalescent to go to the country. I may add, however, that when the hectic was nearly gone, sulphate of iron was added to his sulphuric acid, in order to co-operate with the animal food in removing all remains of anæmia.

Dwell likewise on the case of Mr. Morgan, æt. about 20, who was not only highly hectic, but had also slight gastro-enteritis. I continued the gentle external use of mercury, allayed the irritation of the mucous membrane by mild antiphlogistic means, &c., but allowed him plain veal and chicken broth, then beef tea and mutton broth, in such quantities as I found he could bear. The gastro-enteritis having been thus pretty well subdued, he became tolerant of the mineral acids and sulphate of iron, well guarded with laudanum. His youth rendered the progress of absorption more rapid than in the preceding case, for the fluid all disappeared within ten days, with entire relief to his dyspnœa; and so great a restoration resulted from the new supply of oxygen and removal of anæmia, that a week afterwards he came in a cab from the city to the West-end to call upon me.

Auscultators should be careful not to throw away their chances by neglecting to use the stethoscope. In one instance, an accomplished physician, having examined the top of the lung and found it dull, with the other usual signs of induration, without following up his examination down the whole side, took the case for phthisis, and ordered the patient to the southern coast. A common friend having mimicked to me the mode of breathing of the patient, I declared at once, (for his imitations were most graphic,) that such was not the dyspnœa of phthisis; and as I knew him not to be a phthisical subject, and to have been in robust health two months before, I entreated of our friend to go down to the patient in the country the same afternoon, and not to let him stir (for he was to start two days after) without a consultation of physicians. I declined going myself, as having suggested the measure. Answer was returned that if I would not go, he would see no one else, as he had originally intended to have consulted me. I saw him, and found what I was before sure of: namely, that the whole side was full of fluid, indicated by the usual symptoms, including anæmia and the physical signs. I flattered him that we should empty the chest within a week or ten days, and that he would be convalescent, deo volente, in a month. So it happened, though mercury could only be borne externally, and that with great reluctance on the part of the patient. His convalescence was somewhat protracted, in consequence of the irritable state of the mucous membranes rendering them incapable of bearing the animal diet, and ferruginous preparations suitable for the removal of the anæmia. He had flying pains principally below the region of the heart, but these ceased under the use of plasters, especially belladonna; and he has enjoyed perfect health for the past year.

In the great majority of cases, an attrition murmur, (always most perceptible along the line of the margin of the lungs from the heart, curling backwards to the bottom of the lower lobe; in other words, below the axilla,) was found to appear as the fluid disappeared by absorption. I have noticed that the longer this attrition murmur lasts, the better; as the adhesions are more apt to be of a loose and elongated character, which I infer from the patient's recovering complete resonance on percussion, and complete restoration of respiratory murmur sooner than in other cases where the attrition murmur lasts but a few days, in consequence, probably, of the adhesions becoming universal and close. Whenever the latter is the case, the patient may lay his account to being more or less delicate for a year and a half or so, because the lung requires fully this time slowly to stretch the adhesions, to reacquire her natural respiratory murmur; or, if this should never occur, for the patient to gain a compensation by hypertrophy of the opposite lung, which, meanwhile, has constantly been doing vicarious duty; namely, breathing in an exaggerated or puerile manner. These exquisite arrangements of Providence cannot be sufficiently admired. The more we look into them, the more complete we find them.

The lung sometimes remains permanently condensed, from the thickness and utter inexpansibility of the side; and dilatation of the bronchi may result from this cause, of which I have met with and detected four or more instances. Condensation of this kind is less frequently attended with falling in of the side than in cases of pleurisy; for the opposite lung slowly becomes hypertrophous and fills up the vacant space, advancing, however, into the opposite side of the chest, and carrrying the heart with it in either direction. Thus, in Peter Parker, an out-patient of St. George's, the heart is protruded almost into the right axilla, and the aorta pulsates an inch to the right of the sternum. Lung condensed by adhesion, is rarely healthy. There is almost invariably a slow, wearing, chronic bronchitis, which harasses and reduces the patient, and generally curtails his existence. Parker had had his cough for ten years, and he was an emaciated and decrepid subject.

Here introduce a number of detached observations, more or less original, on various subjects. Thus, for eight or ten years, I have been in the habit of asking the question of all respectable patients of robust constitutions, who had been attacked with pleurisy, peripneumony, acute rheumatism, whether they were in the habit of wearing flannel, or not; to which they generally answered in the negative—the common reason assigned being, that they were so much exposed, that they could not venture to pamper themselves. I recently put the same question to a London physician, and he gave the same answer with a smile, and "my dear friend, it is impossible," &c. He was attacked with rigors the same night, and had a severe rheumatic fever. I do not quote the poorer classes, for they, almost universally, are deterred from wearing flannel by the expense, and it is notorious that they are subject to acute inflammations of all kinds, in a much greater proportion than the higher classes. Flannel is also highly beneficial to chronic affections of the mucous membrane of the lungs.

Pleurisy is, after rheumatic fever, one of the most frequent causes of pericarditis—not endocarditis, at first—the inflammation being propagated to the pericardium by contiguity of tissue: if endocarditis supervene, it is by propagation from the peri to the endo-cardium.

Diaphragmatic pleurisy may occasion agonising pain by interfering with the action of so great a muscle as the diaphragm. It is in such cases that we occasionally see the patient put on what is called the sardonic grin—a species of sympathetic spasm dependent on the excito-motory system and nerves.

In some convenient part of the paper, give a brief and compact, but very clear synopsis of the signs of a chest full of fluid. For I repeat that, well as these are known to systematic writers, they are singularly forgotten and overlooked by practitioners. They ought, therefore, to be pushed prominently forward on every occasion. Refer likewise to a synopsis of the signs of anæmia in the essay on that subject; by which the practitioner will readily distinguish this condition from that of fever, for which it has been mistaken by Broussais and others.

Wind up by a general statement, that, if Dr. Stokes has cured twenty cases running by Mons. Lugol's solution and ointment of iodine, together with blisters and other means; and I have cured thirty-three consecutive cases by other means; fifty-three cases cured successively, without selection, afford a strong presumption that all really *curable* cases are curable without paracentesis. It remains to be proved by experience whether iodine or mercury be the less injurious to the constitution. I have myself the most favourable opinion of the harmlessness of the iodide of potassium when protected by starch—that is, a little bread with each dose; for I made the experiment of giving eight-grain doses against three-grain doses, in two hundred cases, for the purpose of ascertaining which dose was the most efficacious. The larger, both being given thrice a day, succeeded incomparably the better, and I now rarely give the smaller.

I have met with seven or eight cases of circumscribed pleurisy, and whenever a chronic pleurisy becomes very protracted, I am not sorry to see a purulo-sanguineous discharge take place periodically, as it generally does, into the bronchial tubes; for in this case a slow process of healing generally occurs, and the patient, in a fair proportion of cases, recovers. I have recently discharged one, Henry Wade, who appeared to me to have had a chronic pleurisy engrafted on a previous circumscribed or sacculated one. The history of the chronic one is developed in my journal in the utmost detail; but the patient also informed me that some months before he had been under the care of a physician in Norfolk, who had treated him for six months previously for a discharge of half a pint of pus, mixed with blood, expectorated once a day from the bronchial passages. After this time, he sent him to London to consult me, and I found him with a very circumscribed empyæma that he might have had, obscured by general empyæma. This having been removed, the original circumscribed empyæma pointed at the chest, and discharged by two or three apertures. When the discharge was free by the apertures, it was correspondingly diminished by the bronchial tubes. Both slowly decreased. The circumscribed empyæma seemed to descend very low in the splenic region, and after nine months of hospital attendance as an in-patient, he was dismissed without discharge, with slight cough and in general good health, his weight being at least twelve stone, though a moderate-sized man.

I discharged a patient from the Mary-le-bone Infirmary, cured six times of circumscribed empyæma above the left mamma, and opening into the bronchi. At the end of six months he was completely well.

In another, in the Mary-le-bone Infirmary, the whole length of a probe could be passed directly into the chest. He recovered, but with much collapse of one side.

A third, in the Mary-le-bone Infirmary, a boy of eighteen, had effusion for six months. My colleagues, in consultation, had given their opinion that he was tubercular. The operation of paracentesis, therefore, was negatived. The opposite lung was soon after attacked with peripneumony, and he died, when the exemption from tubercles was proved. I did not then understand an efficient treatment for fluid in the chest; and was therefore an advocate for the early operation on the principle of the late Dr. Thomas Davies, of Broad street. I had much regret, therefore, respecting this case, that the operation had not been performed. One feature was remarkable. Andral, Broussais, and others, recommend that patients in chronic pleuritis should be kept on light diet. This youth ate twelve ounces of dressed meat at dinner; eight ounces at breakfast, with two eggs; tea and milk ad libitum; sixteen ounces of bread daily.

Numerous similar cases show that nature's mode of performing the operation is incomparably more safe than paracentesis.

ART. II.—ON THE PATHOLOGY, PHYSICAL SIGNS, AND TREATMENT OF VALVULAR DISEASES OF THE HEART, IN CONNECTION WITH THE SOUNDS OF THIS ORGAN.[1]

BY T. H. MOORE, M. R. C. S.

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The following case, which has lately come within the range of my observation, I have been induced to give, not merely from the intrinsic value it possesses as being linked with the others, by the symptoms, physical signs, and morbid appearances, but also on account of other particulars, which cannot fail to sanction its introduction here.

A woman, advanced in years, the mother of four children, was brought into the hospital, on the morning of the 16th of May, with both legs, feet, and thighs immensely swollen, presenting a florid red, glossy, erysipelatous hue, nearly as high up as the knees; pitting on pressure; of such weight that it was with pain and much difficulty they could be moved. There was an expression of great distress and anxiety in her countenance; lividity of the lips and cheeks; a tinge of bile on the conjunctiva; turgescence of the jugular veins, with distinct undulatory or pulsatory motions, very remarkable for the regularity of their succession in those of the right side of the neck. No degree of uniformity between them, the cardiac impulses, and the arterial pulsations, could be ascertained with precision, or in a satisfactory manner; their persistence, whether in erect or recumbent posture, was noted;

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[1] London Medical Gazette, June, 1841, p. 542.

with a diminution in their strength, and almost total disappearance on the left side, in the former position. Her breathing is laboured to an extreme degree, accompanied with extraordinary action of the thoracic muscles; rattling in the trachea and thorax, sensible to the ear and touch. She sits propped up in bed, and obtains but short interrupted intervals of sleep; has lost her appetite; passes but a small quantity of urine, and is irregular in her bowels.

Physical Signs of Chest and Heart.—Percussion over and beyond the limits of cardiac region elicits a very dull sound, extending beyond the sternum to the right side; the heart's impulses can be felt in the cardiac region, not violent nor forcible; on the contrary, weak, but tolerably extensive, the shock being communicated to the touch over a less circumscribed space than that observed in health. A strong vibratory thrill is imparted to the palm of the hand, proceeding from the vibration of air and mucus in the bronchial tubes, intermixed with that resulting from the blood's passage through the cavities of the heart. During the act of suspending the respiration, the sounds of this organ, previously inaudible, and altogether obscured by the respiratory phenomena, became so far distinct, that their action was reported to be extensively heard. Beneath the mammæ, and within the precincts of the præcordial region, the first and second sounds, the entire of the heart's rhythm, are so much confused, masked, or replaced by a constant loud whizzing or rasping murmur, that it is impossible to distinguish between them individually, or recognise them collectively: with each impulse and ventricular contraction it commences, and progresses with briskness, roughness, harshness; and at the moment it should cease with the diastole of the heart, and the second sound succeed, a repetition of these physical signs takes place: a retroceding, regurgitating, whizzing murmur, less vigorous, less forcible in its intensity, and possessing less of those characteristic features of the former, becomes developed, and is communicated to the ear; at the termination of which the heart's impulse succeeds, the ventricular contraction follows, accompanied by the rushing or whizzing murmur, not unlike the sound produced by the rasping of the crust of bread, occupying the entire of the first sound, masking the second, and obliterating the interval which naturally intervenes. At the upper part of the sternum, and under the clavicles, the second sound is audible, though feeble; not so clear, having lost much of its energy, and not possessing that sharp, well-defined "claquement" so peculiar to it. Each arterial and valvular "clack" is preceded by a bellows murmur, regular in its succession, and constant in its intensity, but less distinct than that heard in the præcordial region; seemingly continuous with, or a prolongation of, these sounds, and gradually diminishing as we approach the fourchette of the sternum. Pulse 96, full and regular, counted in carotids; it cannot be felt at the wrist on account of the œdema; percussion over the posterior part of the right side is dull; the physical signs indicate, in addition to acute bronchitis, extensive congestion and œdema of the pulmonary tissue, with an accumulation of fluid in the left pleural cavity.

The abdomen is swollen, from the quantity of fluid in the peritoneal sac, a sense of fluctuation is afforded on percussion, and the true condition of the abdominal viscera rendered difficult to ascertain. The liver feels hard, enlarged, indurated; its sharp edge thickened and rounded. The intestines are distended with flatus.

History.—For two years she has been subject to a chronic catarrh, and has for many months suffered from pains in the left side, palpitations, flutterings, and other symptoms of deranged circulation; the distress occasioned by the dyspnœa, violent palpitations excited by very trivial causes, agonising pains, and præcordial oppression, has been much increased within the last few months. The swellings appeared for the first time six weeks since, in the feet and legs, spreading upwards towards the thighs and abdomen, finally extending over the upper extremities, and producing that state of misery in which she was brought into hospital.

Two days after this report was taken she died.

Autopsy.—The serous cavities of the abdomen and chest, left pleura in particular, contained light straw-coloured fluid; the quantity in the former exceeding four or five quarts; that in the latter, a pint.

The heart, when exposed by laying open the pericardium, occupied the mesial line, and encroached considerably on the right pleural cavity, in consequence of its enormous dimensions from the increased capacity of the right ventricle and auricle; on its anterior surface is one of those white patches so frequently seen, occupying in its extent the circumference of half a crown. The veins are enormously turgid, those on posterior aspect, traversing from base to apex, particularly so. The heart is very flabby. The exterior of the right ventricle, which is considerably augmented in its transverse and perpendicular diameter, presents a yellowish marbled colour, traversed by turgid bloodvessels; whilst the left, comparatively small, affords a specimen of two rare pathological alterations. As the heart lay in the pericardium, two circumscribed purplish or livid patches attracted our notice; one situated about an inch and a half, the other a few lines, from the apex. The superior one larger, in close proximity to the septum, does not exceed the size of a sixpence; whilst the smaller of the two might be covered by a fourpenny piece. The pericardium corresponding to each is more opaque and dense than that covering the rest of the ventricle. Two distinct indentations, similar to those which may be produced by punching in the muscular substance of the ventricle with the knuckle of the forefinger, were visible on the anterior part of the left ventricle; corresponding to which, and the dark-coloured patches, the muscular fibres of this cavity were so thin and attenuated, that the interior of the ventricle could be felt by the introduction of the finger into either of these depressions or indentations. On first inspection, it was supposed a perforation had occurred near the apex; such, however, was not the case. By examining from the interior of the ventricle, it was evident that, from the absorption and attenuation of the muscular fibres of the ventricles interposed between the endo and peri-cardium, two pouches had formed, which, when distended with blood, or protruded by means of the finger, constituted two circumscribed true aneurisms of the ventricle; in one of which was contained a dark-coloured fibrinous coagulum, being entangled between the fleshy columns encircling the sac, and distinct from other coagula in the ventricle.

The pericardium can be detached with the greatest facility, and removed from the surface of both ventricles, by exerting a slight degree of traction. The muscular substance of the ventricle, excepting the two places described, is hypertrophied, but of a pale colour, separable into distinct laminæ by making a transverse section, raising the fibres, and drawing them from apex to base; thus three, four, or even more plates, or layers of fleshy fibres, can be removed, pale and flabby, but increased in thickness.

It seems probable that the cellular tissue separating the muscular fibres had become infiltrated with serum, participating in the œdematous condition of the cellular tissue diffused over the body; such a supposition becomes justified, from the colour of the right ventricle appearing to originate in a sub-pericardiac infiltration into the cellular tissue, scattered amongst and serving to connect the muscular fibres together—from the muscular fibres themselves being flabby and attenuated—the fleshy columns being thin and numerous—and from these not being sufficient to account for the tumefied appearance and obvious augmentation in the volume of this viscus.

The auricles, right and left, more especially the former, are increased in the capacity of their chambers to double or treble their usual size. Venæ cavæ dilated, gorged with blood; coats somewhat thickened; parietes of auricles hypertrophied; appendices enlarged, and musculi pectinati lengthened; the endo-cardium of the left is increased in density, opaque, and easily detached from the muscular fibres.

The right auriculo-ventricular aperture is of enormous size, dilated to nearly double its general measurement. The tendinous ring is sufficiently distinct. The tricuspid valves are inadequate to effect the closure of the orifice, two thirds being thickened, in their perpendicular measurements, with fibrous prominences on their surfaces and borders. The left auriculo-ventricular aperture and mitral valves are similarly affected, but not to the same amount.

The pulmonary valves are healthy; those of the aorta of a deeper red in their colour, but retaining their transparency; a slight increase in their density was noticed. The calibre of the arch is dilated. Steatomatous depositions pervade the interior of the aorta, and may be seen in greatest number at some distance from the valves. Not far removed from one of these, there has been deposited a quantity of fibrin beneath the serous, between it and the muscular coat. Advancing from the ascending and transverse portions of the aorta, the coats were found more healthy.

The superior parts of the pharynx and larynx are of a deep red, approaching to a purple hue. The epiglottis less elastic than natural; its mucous membrane of a violet colour, thickened, and velvety feel. The rima glottidis appears narrowed in its antero-posterior diameter; no ulceration could be detected.

Head.—From three to four ounces of limpid serum was effused between the arachnoid and dura mater, also between the arachnoid and pia mater; abundant at the base of the brain, at the superior part of the spinal column, and in the vertebral theca.

In the floor of the third ventricle, anterior and inferior to the orifice of the *iter a tertio ad quartum ventriculum*, a second orifice, distinct, smooth, and circular, attracted my attention in this, as well as on two previous occasions, in brains not affected by disease. Into this orifice the point of an ordinary sized director can be introduced, which, taking the course of the canal, proceeds upwards and backwards, beneath the floor of the aqueduct of Silvius, and that of the fourth ventricle, on the superior surface of the pons varolii. Passing downwards and backwards between the processes a cerebello ad testes, still preserving the mesial line, it gradually contracts in size, and seems to terminate in a species of cul-de-sac, at a short distance above the posterior spinal fissure, with which it was at first supposed to be continuous; but more minute examination did not ratify this supposition, as the continuation of the canal could not be satisfactorily ascertained. On three separate occasions have I been foiled in tracing a direct communication between the two, and establishing an immediate connection of one with the other, but have succeeded in observing that a minute fissure leads from the apparent termination of the canal. This canal, when laid open in its entire extent, from the floor of the third ventricle, posterior to the infundibulum, to its termination behind, describes a curvilinear course, is circular in its calibre, and presents a smooth, polished, glistening internal surface, being lined throughout its entire extent by serous membrane; its parietes, varying from one to two lines in thickness, consist of a layer of cineritious and medullary substance, inclosed between two laminæ of serous membrane.

Observations.—It is unnecessary to remark, that we possess in this case more than an ordinary amount of instruction; but in commenting on some of the leading features during life, and the pathological changes observed in the autopsy, it will be more profitable to inquire in a cursory manner—

1st, Into the similarity existing between the symptoms, physical signs, and pathology of this case, and those noticed in others, as illustrative of the disease under consideration.

2d, Into the probability of those physical signs having originated in, and being produced by, the aneurisms of the ventricle, and the liability of the one being mistaken for, and confounded with, the other, from such coincidence.

3d, Whether the attenuation of the parietes of the ventricle in those two circumscribed spaces, which was conducive to the formation of the aneurismal pouches, resulted from an inflammatory attack of the muscular structures, preceded, was coeval with, or consequent upon the morbid changes, progressing in the valvular structures.

From the combination of two circumstances, permanent patency of the auriculo-ventricular apertures resulted—first, from a dilatation, an increase in the circumferences of the orifices; secondly, from retraction of the valvular tissues, and consequent deficiency in their length; diseases in themselves sufficient to account for the presence of the physical signs—the masking of the entire of the heart's rhythm, heard in the præcordial region, by a loud whizzing murmur or constant buzz. But herein we are enabled to detect a very striking dissimilarity between the auscultatory phenomena and those recorded in the preceding cases; inasmuch as, at no period of the examination, nor by resorting to those manœuvres and experiments, as far as her deplorable condition permitted, were we able to observe a remission or intermission in the vigour, the intensity, the regularity and asperity of those phenomena, so obvious and so constant in the others, as to be considered one of the characteristics of this disease, and deemed almost pathognomonic of its existence.

We have recorded, it is true, a marked difference between the harshness and loudness of the abnormal murmur accompanying the ventricular contraction, and that heard during its diastole. In the description given, it has been noted, that the sound communicated to the ear gave origin to the idea that "the retroceding, regurgitating whizzing murmur, less vigorous, less forcible in its intensity, and possessing less of the characteristic features of the former," (*vide* report of physical signs, &c. &c.) proceeded from a reflux of blood through the auriculo-ventricular orifices.

That this description, though virtually correct, must be at variance with our physiological knowledge of the succession of phenomena composing the heart's rhythm, and if not commented on, must lead to confusion, requires not a second consideration; instead, therefore, of being led astray by the sounds communicated to the ear, and attributing this train of phenomena to the regurgitated current produced during the ventricular contraction, and in conjunction with the aneurismatic condition of the left ventricle, chiefly instrumental in causing the loud rasping murmur, we must in preference ascribe it to the succeeding column of blood, passing over an uneven, roughened surface, immediately after the subsidence of the muscular contraction; continuing during the diastole of the ventricles; occupying the heart's interval of repose; being propelled forward in part by the action of the auricles, but chiefly by its own unopposed gravity.

Let us now inquire whether these aneurisms were antecedent to, coeval with, consequent on, or subsequent to, the disease of the valves. The two first inquiries may be disposed of by our confessing that, through want of a sufficient number of cases and consequent experience, a perfect silence must be maintained; but in objecting to trace their origin to, and refusing to acquiesce in any opinion which may attribute these aneurisms to a disorganisation of the valves, it is but right to state that this opposition has been grounded on, and the inference drawn from, the extreme rarity of the coexistence of these affections, which, if viewed in the light of cause and effect, ought to retain a greater comparative frequency than has hitherto been recorded.

In searching after the predisposing and determining causes of this disease, pathological examination and ocular demonstration direct our attention to the existence of acute inflammation of the serous and muscular structures of this viscus at some previous period; but in recalling to mind the different divisions of inflammation; the various changes effected by each, in different parts of the animal economy; the hardening and softening; the thickening and thinning; the increase and decrease of volume, in organs whose structures accurately correspond, we must revert to the effects of that slow, insidious, subacute inflammatory process on other parts of this organ, to be enabled to offer a satisfactory explanation.

During the progress of this inflammatory action, we have had frequent opportunities of attesting that the muscular fibres become weakened and flabby; decreased in bulk and energy; yielding during this atrophying process to the force of the circulating current; and dilating the cavities, in thus yielding during each act of propelling the blood into the arterial system. From an excess of innervation; from a predominance of this enfeebled, thinned, attenuated condition of the fibres in two or more circumscribed spaces, and their consequent inability to offer further resistance to the circulating column of blood, they either give way, are absorbed, or form on various portions of the heart's surface those aneurismal sacs, into the interior of which, the blood entering as it passes through the cavity of the ventricle, a gradual distention of its walls takes place, until in the course of time it may have attained a size equaling the normal dimensions of the heart.

That these pouches did not originate in rupture, nor ulceration of the fibres, consequent on the formation of an abscess in the substance of the ventricle, may be inferred from the uninterrupted continuity of the fibres after the removing of the lining membrane of the aneurism, the endocardium ventricle, and there being none of the distinguishing marks of a former abscess.

I can well conceive that if this aneurismal affection of the parietes of the ventricle had existed *per se*, and the auriculo-ventricular valves had remained sound, we should have had symptoms precisely the same, and physical signs differing but slightly from those described, as the attendant phenomena of permanent patency of the apertures, with morbid growths or excrescences on the surface of the valves.[1]

BIBLIOGRAPHICAL NOTICE.

Rigby's Midwifery.[2]

The advent of the volume before us was announced in a late number of this Journal. It was published in London as a part of Tweedie's "Library of Medicine," and is certainly equal to any of the volumes that have preceded it. It is written sensibly and clearly, and the author is aware of most that has been done in the important department of medical science embraced by it. We can, consequently, strongly recommend it to the practitioner and student. The general anatomy and physiology of utero-gestation and fœtal existence are ably treated—subjects sadly neglected in many of our obstetrical works. But few of the diseases of the childbed state are touched upon—they are puerperal fevers, phlegmatia dolens, and puerperal mania.

The work is divided into five parts:—Part I. Embracing the Anatomy and

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[1] We have taken the liberty of considerably shortening this paper: if the reader should perceive any want of perspicuity, he will, therefore, please to attribute it to us. —Ed. Gaz.

[2] A System of Midwifery, with numerous wood-cuts. By Edward Rigby, M. D., Physician to the General Lying-in-Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, &c. &c. With notes and additional illustrations. 8vo. pp. 491. Philad. 1841.

Physiology of Utero-gestation; Part 2. Natural Pregnancy and its deviations; Part III. Eutocia or Natural Parturition; Part IV. Midwifery Operations; and Part V. Dystocia or Abnormal Parturition.

MISCELLANEOUS NOTICES.

Dr. Mandl on the Chemical Analysis of the Blood in a Pathological State.[1]—Dr. Mandl has contributed three very elaborate papers to the Archives de Medicine, for the latter months of last year, on this very difficult but very important and interesting subject.

The *first* is occupied with a review of the numerous, and from their discordance often bewildering, statements of different chemists and physiologists as to the composition and the relative qualities of the most obvious constituents of the blood—the fibrine, the globules, and the serum. There is still much contrariety of opinion on this subject, and we are far from having arrived at any recognised exactitude of knowledge. Perhaps the very attempts which have been made of late years, since chemistry has made so much progress, to obtain too minute analyses of the animal fluids, has retarded and impeded our progress in our physiological acquaintance with them, alike in a healthy and in a morbid condition. To be a useful animal chemist, the experimenter must be a practical physician at the same time; and we cannot expect to obtain any important results, unless the various changes, which are induced on the fluids by disease, are attentively examined and duly appreciated by the bedside of the patient, as well as afterwards in the laboratory. To select one out of many proofs that *mere* chemistry can do but little for humoral pathology, we may allude to the circumstance of the two principles, albumen and fibrine, being recognised to consist of the same chemical elements in nearly the same proportions, while at the same time every one knows how different are the phenomena which they exhibit in the chemistry of the living body. And if we wished to show the discrepancy of authors on the relative proportions of the different elements of the blood during health, we have only to mention that, according to Lecanu, there are about three parts of fibrine in one thousand parts; whereas Berzelius estimates the proportion at less than one part; Fourcroy, as varying from 1 to 4; Davy, as 1½; Nasse, as 2¼; Müller, at nearly 5 (in the blood of the ox); and MM. Andral and Gavarret, at 3. Well, therefore, may Professor Giacomini assert in a recent paper, (v. Gazette des Hôpitaux, No. 20, 1840,) that "if we compare the numerous tables on the composition of the blood, published in works on chemistry, we do not find two that are not at variance."

If from the chemical analysis we proceed to the physiological interpretation of that most common phenomenon, the coagulation of the blood, we find as much discordancy of opinion as on the relative proportion of the fibrine. Some have attributed it altogether to the blood being at rest, and have therefore ascribed its fluidity to the circumstance of it being constantly in motion during life. But how then shall we explain the fact of the entire mass remaining perfectly fluid within the vessels in some cases of sudden death, and of the contents of a vein or artery in any intermediate portion of the tube between two ligatures, and thus kept in a state of complete repose, not becoming coagulated?

Others have sought for a reason of the phenomenon in the refrigeration of the blood when it is drawn from the body. But numerous experiments have shown that this idea is quite untenable; seeing that the process actually goes on more quickly if the temperature of the blood is kept to the heat of the living body, and that, on the other hand, it is considerably retarded if the temperature is much reduced. Hewson has even proved that the blood after being frozen and again thawed will coagulate, as usual, into a solid and a fluid portion.

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[1] Medico-Chirurgical Review, July, 1841, p. 176.

Then as to the influence of the atmosphere on the process of coagulation, various experiments have been at different times made to ascertain the effects of withdrawing its pressure, by introducing a vessel full of fresh-drawn blood under the bell of an air-pump; but hitherto no satisfactory conclusions have been drawn from these experiments; different results having been obtained by different men.

Then again, it has been supposed by some that the coagulation of the blood out of the body is somehow connected with, if not dependent upon, the disengagement of gaseous elements from its mass. Home and Scudamore have, for example, attached much importance to the escape of carbonic acid; but Dr. Davy has subsequently denied its influence altogether; and, indeed, might we not well ask, how does the blood not every moment coagulate in the lungs, seeing that there is a constant evolution of this very gas during respiration?

Dr. Mandl sums up his observations on this subject in these words:—"What then, up to the present moment, is the result of all the chemical experiments which have been made to explain the coagulation of the blood? None, absolutely none. How are we to account for the blood, contained in the jugular vein of a dog, rabbit, remaining liquid for some hours in a portion of the vessel which has been separated from the rest by means of two ligatures, and subsequently removed from the body of the animal? The coagulation is retarded under such circumstances by cold. But when the vein is opened, the blood coagulates in the course of two or three minutes. Now how are we to explain these phenomena? We must confess that we are utterly unable to do so. This experiment is quite conclusive against the idea that coagulation is owing to the blood being at rest, as well as against that which attributes it to the influence of refrigeration."

Dr. Mandl subsequently alludes to the influence of certain chemical substances, when mixed with fresh-drawn blood, in retarding the process of coagulation. These substances either precipitate the albumen and fibrine in the form of molecules, which do not afterwards coalesce, or they hold these elements in chemical solution. For example, by means of sulphuric acid we may obtain a solution of blood; but we have no right to say that, under such circumstances, we have prevented the coagulation of the fibrine.

With one short extract, which seems to us to suggest a useful distinction, we shall close our remarks on this subject. . . . "In studying the phenomena of the coagulation of the blood," says Dr. Mandl, "we ought to distinguish two moments or circumstances which are very different from each other:—the first is the solidification or precipitation of the dissolved fibrine; and the second is the contraction of this fibrine newly solidified. This contraction of the fibrine may take place in three or four minutes, or it may require several hours, according to the refrigeration, the evaporation, the force of the jet, the greater or less quantity of the blood drawn, the external temperature, the humidity of the air, &c. &c. Now, authors have always confounded this second moment, the contraction, with the first moment, the precipitation; and yet these two phenomena are as distinct from each other, as the precipitation of a salt and its crystallisation. When Hunter wished to explain the process of coagulation by attributing it to the contraction which is observed to take place in the fibrine as in muscular tissue, he used to say—this *must* contract, because it *does* contract; he thought only of the second act or moment of the process." . . . . We proceed now to offer some remarks

On the Formation of the Buffy Coat.—Without entering at all upon the disputes of different chemists as to the nature of the buffy coat, we may merely state that, for all practical purposes, it may be admitted that it is part of the fibrine, held in solution in the blood, and deposited free from any admixture of red globules. The simple and beautiful experiment of Hewson proves this very distinctly: by removing with a spoon the upper colourless layer of the blood, he observed that the buffy coat is quickly formed in this decanted serum.

If we now inquire, what is the cause of this deposition of part of the pure fibrine of the blood on the surface of the clot, in certain forms of disease, a great number of most estimable authors will at once answer, "a greater than usually slowness in the act of coagulation." But another set of authors, whose names are entitled to as much credit, assert the very contrary, and distinctly maintain that this process actually goes on more quickly than usual, when the buffy coat is formed. For example, Andral and Forget, in their recent memoirs, state—"the separation of the blood into its solid and fluid portions takes place rapidly in plethora and in inflammatory diseases, as daily observation testifies."

We cannot, therefore, assent to the opinion that the formation of the buffy coat is owing to a retardation in the process of coagulation. Neither can we ascribe it, as some have done, to a mere excess in the quantity of the fibrine existent in the blood; for it has been amply shown by several writers, that not unfrequently the blood contains an unusual quantity of this constituent, and yet no buffy coat is formed on its surface.

M. Magendie, in his recent work on the physical phenomena of life, endeavours to explain the difficulty by ascribing the buffy coat to "one of the most simple and best understood physical phenomena, the relative gravity of the globules and of the fibrine; the former having a greater specific gravity than the latter, tend to fall to the bottom of the mass, and thus the fibrine collects, more or less exempt from them, at the surface."

This explanation may be correct; but certainly the premises on which it is founded have not been proved. We do not, for example, know for a certainty that there is any alteration in the specific gravities of the fibrine and of the globules; and we should also remember that it is part only of the fibrine that collects at the surface, while another part sinks down, and entangles in its meshes the globules.

M. Mandl proceeds to expound his own views on this question. The following extract will enable our readers to understand the scope of his researches.

. . . "Every one is agreed in admitting that in the formation of the buffy coat, the red globules are precipitated before the fibrine is coagulated. Now on what does the formation of this buffy coat depend? we answer, on all those circumstances which tend to favour this precipitation of the globules before the coagulation of the fibrine. Among these circumstances we may first mention the specific gravity of the serum. Whatever renders the serum lighter than usual, may give rise to the formation of the buffy coat, since the globules are then precipitated more quickly than usual. Again, the blood and the serum, when cooled, are more dense and heavy than when they are warmed; and, therefore, whatever tends to keep the blood either warm or to cause it to cool, will have the effect of on the one hand favouring, and on the other hand of retarding, the formation of the buffy coat. By attending to these circumstances, we can explain the results of numerous experiments which we find recorded in the writings of various authors, but which are otherwise not easily intelligible. The small interrupted stream from a small opening in a vein, the vessel into which the blood is received being shallow, cool, and held at a distance from the arm, a cool state of the atmosphere, &c. &c., are so many circumstances which are unfavourable to the *franche* formation of the buffy coat."

In illustration of his views, Dr. Mandl states that, from various experiments, we have reason to believe that the specific gravity of the blood in inflammatory diseases is, in spite of a greater quantity of fibrine contained in it than usual, somewhat lower than in health. He appeals to the writings of Thackrah, Scudamore, Babington, and Davy, in proof of this assertion. Nasse, also, of Bonn, in his recent work—Ueber das Blut, 1836—distinctly states that the buffy coat is stronger in proportion as the specific gravity of the blood is less, and that it forms with much greater difficulty on blood that is very dense.

If it be now asked, to what is this diminution of the gravity of the blood in inflammatory diseases owing, M. Denis (Etudes Chimiques sur le Sang) tells us that there is, under such circumstances, a deficiency of the usual quantity of the albumen, and of the saline matters dissolved in the serum. This statement has not, however, been confirmed by the subsequent researches of MM. Andral and Gavarret, nor by those of M. Lecanu.

It is not improbable that the specific gravity of the globules themselves may vary a good deal under different circumstances; but as yet we have no satisfactory data on this subject.

Of Blood deficient in Fibrine.—In not a few diseases is the blood found in what has been called a dissolved state, more than usually liquid, its coagulum being soft and imperfectly formed, and its watery portion more than usually abundant. Such is the case in almost all malignant fevers, in scurvy, in purpura, &c. &c.

Let us consider the state of the blood in scurvy for a few minutes. It is admitted by all authors who have seen much of this disease, that there is not only a marked deficiency of its fibrine, but also a very considerable increase of the alkaline salts of the blood. Now what is the effect of these salts on the coagulation of healthy blood?—to retard, or even to prevent the process altogether. Dr. Mandl seems to think that we are not to infer, from this condition of the blood, that there is necessarily any considerable diminution in its normal proportion of fibrine, but only that this element is held in solution in such a manner that it is not easily precipitated from the other elements of the mass.

Our information is as yet very defective as to the existing proportions of the saline matters of the blood in those other diseases where the blood is known to be more than usually thin and diffluent. It is worthy of notice that the commixture of putrid animal matters with healthy blood has nearly the same effect upon it, as the addition of a quantity of an alkaline salt—viz. to impede the coagulation, and to cause the mass to remain more fluid and dissolved. Whether the blood becomes actually impregnated with any miasmatic particles in typhus and other malignant fevers, is not easily determined; but certainly there is nothing improbable in the supposition.

"We regret," says Dr. Mandl, "that we do not possess more complete analyses of the blood in typhoid fever. Is the fibrine actually diminished in quantity? and is the proportion of the saline ingredients, or of the albumen, which in our opinion produces analogous effects, at all increased? As yet we do not accurately know; but it may be readily understood, from what we have previously stated, that we must be on our guard in at once concluding that there must necessarily be a diminution of the actual quantity of the fibrine merely from the amount of it obtainable from the coagulum. M. Denis positively attributes the defect of coagulability and the other differences of the blood in typhoid fever to an augmentation of its saline ingredients."

Dr. Mandl next alludes to the alleged changes of the globules of the blood in disease.

"We shall now," says he, "inquire how far circumstances may influence the proportion or relative quantity of the globules in our examinations of the blood, and shall allude more particularly to that condition of the blood where the coagulum is found to be more than usually soft and unadherent, because it is precisely in such a case that experimenters have discovered an abnormal proportion of the globules.

"To determine the proportion of the globules in any quantity of blood, we divide it into two parts; in one of which we ascertain the quantity of the fibrine by stirring it briskly with a bunch of rods, and then deduct the weight of the fibrine so obtained from the weight of the coagulum, in the other portion of blood previously dried. Now, the fibrine being often unusually soft, it will be found to be very difficult to separate it completely; and hence the proportion of the globules will often be estimated as considerably higher than is normal, in consequence of a portion of the fibrine remaining in union with them.

"Again, we have previously seen that a firm and well-contracted coagulum contains a large proportion of globules, and that, as a certain quantity of them escape our analysis, the exact amount of this proportion is apt to be understated. On the contrary, in a coagulum which is soft and does not retain its globules so firmly, the proportion of these globules is apt to be estimated too highly. It results from our observations, that the more quickly that the fibrine coagulates, the less will be the quantity of it (the fibrine) that is found united or associated with the globules; and, on the contrary, the more slowly that the fibrine coagulates, the larger will be the quantity of it that is found with the globules: in other words, the relative proportion of the globules will be diminished in the first instance, and increased in the second. Now the presence of saline matters, which retard the coagulation of the blood, must produce on the one hand a soft coagulum, and on the other hand, an apparent increase in the proportion of the globules."

MM. Andral and Gavarret have, in their recent memoirs on the changes of the blood in various diseases, characterised the second class in their humoral nosology, as that in which the proportion of the fibrine of the blood is often diminished, while that of the globules is often increased. In this class they have arranged all the tribe of continued fevers upon what we consider to be very insufficient information. For other observers, as Dr. Reid Clanny and Dr. Jennings, have expressly stated that, according to their researches, there is a notable diminution in the proportion of the globules of the blood in these very diseases. The question, therefore, still remains undecided. Indeed much, very much, requires to be done before we can assure ourselves of having arrived at any exact conclusions on many of the apparently most simple questions connected with the physiological and pathological conditions of the blood."—*Archives Generales de Medicine.*

On the Treatment of Hæmoptysis with Tartrate of Antimony.[1]—It might at first be presumed that the tartrate of antimony, in consequence of its vomitive action, should rather aggravate than arrest the spitting of blood from the lungs; but, from the observations of Stoll, it appears that this is really not the case. The following instance, among many others, related by the illustrious physician of Vienna, is well worthy of notice.

"I remember," says he, "to have had under my care a young Turk who had been seized with bilious fever and with profuse hæmoptysis. I immediately ordered him a vomit. The attendants were frightened at the prescription, and most anxiously awaited the effects of the medicine; being afraid that the hemorrhage would be greatly increased by the effects of vomiting. But no sooner had the patient rejected a large quantity of bile from his stomach, than all traces of the hemorrhage ceased, and he recovered without any return of it."

After citing numerous similar cases, Stoll remarks:—"Vomentes ne guttam sanguinis rejecerunt, quasi ipsa emesis hiantia pulmonum vasa quovis auxilio citius atque efficacius stringeret; et, vomitu jam peracto, aut nihil omnino sanguinis, aut ejus nonnisi paucum quid per intervalla et ad exiguum tempus comparuit."

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[1] Medico-Chirurgical Review, July, 1841, p. 190.

It should be stated that Stoll seems to have employed this mode of treatment only in cases of hæmoptysis accompanied with bilious symptoms, and seldom in those where there was any marked predisposition to pulmonary consumption.

Several writers subsequently have adopted the emetic treatment of hæmoptysis, and very different results seem to have been obtained in the hands of different physicians; for while some strongly approve of it, others as energetically condemn it. As a general remark, we may state that ipecacuanha has usually been preferred as an emetic in cases of pulmonary hemorrhage to any of the preparations of antimony; the former drug being supposed to possess a peculiar astringent property on the vessels of the lungs.

M. Nonat, one of the physicians of the Hôtel Dieu at Paris, however, has of late been using the tartrate of antimony in numerous cases of the disease, and reports most favourably of its effects. He has used it not only when the stomach and liver were evidently at fault at the same time, but also in many instances where there was no disturbance of the digestive organs, and where, therefore, the only indication was to arrest the discharge of blood from the chest.

Case.—A man, thirty years of age, was admitted into the Hôtel Dieu on the third day of an attack of hæmoptysis, which had resisted bleeding from the arm, and the use of other remedial means; it was the first attack of the disease which he had ever experienced.

The symptoms on his admission were well marked: frequent cough, with the expectoration of frothy sanguineous sputa; mucous and sub-crepitant *rale* over the summit of the right lung (percussion gave a dull sound at this spot); sense of heat in the chest, and dyspnœa; pulse frequent and rather strong. There were also symptoms of considerable gastric disturbance—such as a coated tongue, bitter taste in the mouth, nausea, &c.

An emetic of tartrate of antimony was ordered; the stomach symptoms were quickly relieved, and the spitting of the blood entirely ceased.

The *second* case is very similar, and the *third* one was still more severe.

A middle-aged woman was seized with a second attack of hæmoptysis, which had already continued for four days before M. Nonat saw her. The previous attack had occurred two years before, and had lasted for nine days before the hemorrhage entirely ceased. An antimonial emetic was at once ordered her; it caused her to vomit three or four times freely; at the expiry of a few hours, the sputa ceased to exhibit any trace of blood; and from this time they were nearly colourless.

After mentioning another successful case, M. Nonat then adduces the history of other two cases, in which the emetic practice failed altogether in arresting the sanguineous expectoration. In one of these, the patient was evidently labouring under tubercular phthisis in an advanced stage; the first dose of the emetic seemed to produce little or no effect on the pulmonary hemorrhage; but on being repeated a few days subsequently, it was distinctly increased, and considerable difficulty was experienced in subduing it.

M. Nonat candidly admits that the exhibition of emetics in a case of hæmoptysis, where we have reason to suspect ulceration of the lungs, is scarcely warrantable, and he very judiciously adds, that the practice is best suited to those cases of the disease in which the hemorrhage is of an active nature, and is accompanied with the *molimen hemorrhagicum.—Bulletin de Therapeutique.*

Remarks.—We have, for several years past, been in the habit of employing the tartrate of antimony in the treatment of hæmoptysis; but rather in small doses repeated at short intervals, than in full doses as an emetic. For example, a grain and a half, or two grains of the salt, may be dissolved in eight ounces of water, and half an ounce of syrup of poppies added to the solution; of this mixture, two table-spoonsful should be given every two or three hours. We can confidently recommend this practice, both for its safety and its efficacy.—*Rev.*

M. Trousseau on Tracheotomy in Chronic Diseases of the Larynx.[1]—Professor Trousseau has now performed this operation in 113 cases—in eight only of which was it resorted to for chronic disease of the larynx. He ascribes the frequent failure of the operation to the too small size of the canulæ employed before the time of M. Bretonneau, his revered preceptor. He himself has recommended and introduced the use of a dilator, which much simplifies the operation, renders the ligature of the divided blood-vessels almost unnecessary, and greatly facilitates the introduction of the canula into the larynx.

But although the operation may be simplified, it must always be regarded as of serious moment, and should never be resorted to without absolute necessity. For even when the death of the patient cannot be attributed to the operation, there is in many cases after its performance a marked tendency to the supervention of some acute disease of the lungs, which generally proves fatal.

Of the eight cases, in which M. Trousseau performed tracheotomy in consequence of chronic diseases of the larynx, two died from rapid pneumonia. He attributes this tendency to pulmonic inflammation, which is apt to follow the performance of the operation, to the *stasis* or congestion of the blood induced by the embarrassment of the respiration. It would seem, however, from his own statements, that this predisposition to a rapidly fatal pneumonia is not greatest in those cases where the dyspnœa has been most severe before the operation, and moreover, that in such cases the relief obtained is often as decided and as permanent as in other instances, where the difficulty of breathing has not been so great. He has reported several cases in which he has performed the operation successfully on children when the asphyxia was already complete, and life seemed to be utterly extinct; and to these may be added a very extraordinary instance which occurred in the practice of M. Bretonneau. This distinguished practitioner being called to operate on a child, had the misfortune of seeing it expire, to all appearance, before the preliminary incisions were completed. M. Bretonneau, however, without delay, opened the larynx, introduced a canula, and practised artificial respiration. At the end of a few minutes, the child began to breathe, and at length became completely resuscitated. A few days subsequently it was again seized with great difficulty of breathing; this, however, was ultimately relieved.

M. Trousseau relates a case which is very similar in many respects to this one. In June, 1839, Count B. consulted him for a loss of his voice. His constitution had been a good deal injured by irregularities of living, as well as by syphilitic disease; and for the preceding four years he had been subject to epileptic fits. His voice, for a year or two before it was entirely lost, had been thick and indistinct. M. Trousseau was inclined at first to consider the *aphonia* to be owing to a chronic inflammation of the larynx, and recommended the local application of a solution of the nitrate of silver, and of the insufflation of a powder consisting of calomel and sugar, along with the use of antiphlogistic remedies, blisters to the throat, &c.

No relief, however, was derived from this mode of treatment; indeed, the symptoms became worse. An active syphilitic treatment was therefore commenced; but in about a fortnight afterwards the patient was suddenly seized with a fit of suffocation. MM. Marjolin and Cruveilhier were called into consultation, and, as both these surgeons regarded the case as one of syphilitic disease, the same remedies were continued, along with the bleeding from the arm, and the insertion of a seton in the neck. The following night and day, the symptoms of asphyxia were terrible, and, as the patient seemed every moment about to be suffocated, it was resolved to perform the operation of laryngotomy. Before, however, this could be done, the respiration had ceased, the pulsations of the heart could scarcely be felt or heard, and the patient had all the appearance of a dead man; no blood flowed from the wound, and when the canula was introduced, no respiratory movements followed.

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[1] Medico-Chirurgical Review, June, 1841, p. 191.

By first compressing the chest with great force, and pulling down the edges of the ribs, so as to empty the lungs of the air they contained, and then drawing them up, as in a deep inspiration, the air entered the canula with force. These manœuvres were continued for nearly ten minutes, before the pulse at the wrist could be felt. The artificial respiration was persevered in for fifteen minutes more; and then the action of the heart and arteries was fairly re-established. Ten minutes later, the face was slightly convulsed; and soon afterwards an attack of general eclampsia succeeded, during which the air was drawn in with great violence into the chest, and this was followed by a state of stupor. In an hour and a half after the operation, the patient recovered his consciousness. From this moment, every thing went on well; the canula was changed twice every day, and the distress in breathing gradually became less and less. In the month of December (the operation had been performed in the middle of August) the patient appeared to be perfectly well, although he still wore the canula. At this period, the larynx was found to have acquired nearly double its usual volume, and the angle formed at the meeting of the two thyroid plates had become very obtuse. When the canula was closed, no air passed through the larynx from the throat. The diagnosis therefore was, that a tumour existed in the larynx, which would ultimately prove fatal. The deglutition began about this time to be impeded; and at length, in the following May, the poor patient died. A cancerous tumour was found on dissection.

The embarrassment in such cases is to determine what is the exact nature of the existent disease. M. Trousseau, however, lays it down as a maxim, that the operation is never useless, unless there be serious coexisting disease in some other part of the body at the same time; and even then that the life of the patient may be prolonged, although we cannot hope permanently to recover our patient. Whenever, therefore, the diagnosis of such a complication is uncertain, he thinks that we should always give the patient the chance of benefit, by performing the operation.

M. Trousseau insists much on using canulæ of a larger size than are usually employed. He uses a middle-sized one at first, and gradually increases the size, until the air ceases to make almost any noise passing through it during a deep inspiration.—*Journal des Connoiss. Med. Chirurg. and La Gazette Medicale.*

Magendie's Method of treating Neuralgia.[1]—The remedy, *par excellence*, recommended by M. Magendie in the treament of obstinate neuralgia of the face and other parts, is electro-acupuncture. The needles should be made of an unoxydisable metal, and therefore those of platina are to be preferred. With respect to the mode of introducing them, it is better to push them at once, and with a sort of plunge, than to endeavour to drill them more slowly. In most cases, two needles are quite sufficient; one near the origin of the nerve, and the other near its termination or expansion. The former is then to be connected with the positive wire, and the latter with the negative wire of a galvanic apparatus. The patients usually describe the sensations experienced as if a spark or stream of lightning passed instantaneously along all the divisions of the nerve: at the same time the muscles of the part are thrown into contractions. The application is not to be continued beyond a few cases, except in some severe cases, in which a continued stream must be maintained for some time. M. Magendie gives the preference to Clarke's electro-magnetic machine, as being altogether more convenient than any other for the purpose of electro-acupuncture.

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[1] **Medico-Chirurgical Review, July, 1841, p. 202.**

If the neuralgic pain leaves one branch of a nerve to fix itself upon another branch, or upon another nerve, one or both needles are to be withdrawn, and should be inserted along the course of the nerve newly affected.

Several cases of supra-orbital neuralgia are adduced, in which the employment of electro-acupuncture speedily dispelled all suffering. The following one, in which the superior maxillary branch of the fifth pair was the affected nerve, may deserve to be noticed.

M. Thelin had been subject to frequent attacks of most severe neuralgia, affecting the superior maxillary nerve of the left side, when he first consulted M. Magendie. The pain in the gums, lips, cheek, and ala nasi, were insupportable; the patient could scarcely utter a word, and as for mastication, that was impossible. All methods of treatment had been tried, and all tried in vain. What with having many of his teeth extracted, and being leeched and blistered, and physicked for months and months at a time, his constitution had suffered severely. He consulted M. Magendie on the 5th of March, 1838: at one sitting of a few minutes the pain was *chassé*. Since that period, whenever the neuralgia returned, he repaired to M. Magendie, and always left him cured of his sufferings. It is now several months since he has had an attack.

In the second volume of our author's lectures on the nervous system, he has related two cases of severe neuralgia affecting the tongue; in one of which the disease had lasted for four, and in the other, for one year. . . . . "A very fine platina needle was inserted into the trunk of the facial nerve, where it enters the parotid gland, and another was inserted into the affected side of the tongue. In this manner I was sure to act on the seventh and fifth pairs of nerves, since I punctured the trunk of the first and the lingual branch of the second. The needles were then connected with the wires of Clarke's machine. In one of the patients the pain in the tongue immediately ceased, but it fixed itself on the mental branch of the inferior maxillary nerve. The needle was forthwith withdrawn from the tongue, and inserted over the *foramen mentale*. The pain was driven from this point, but it was almost immediately transferred to the infra-orbital nerve. The needle was, therefore, introduced over the aperture from which it escapes. The enemy was thus pursued from one point to another, and ultimately was expelled before the patient left my house. In the other case, the pain, when driven from the tongue, took refuge in the sub-orbital nerve; driven from this, it returned to the tongue, whence it was again dislodged. Ultimately the patient was quite cured."

Certainly such practice is infinitely superior to that of attempting to divide each nerve, that becomes successively affected, as practised, for example, by M. Roux in a recent case, where he divided first the mental branch of the inferior maxillary, then the lingual, and, lastly, the sub-orbital nerve—the enemy, however, retreated to the ethmoidal, where the knife of the surgeon could not reach him.

"In such a case," says M. Magendie, "I pursue the pain, not with the bistoury, but with the galvanic current. Even should it fix itself upon the ethmoidal nerve, I should insert one needle into the nostril, and another into the orbit, along the upper part of its internal wall, at the place where the external nasal traverses it, thus attacking it both near its origin and its termination."—*Gazette Medicale.*

Remark.—We have no doubt that electro-acupuncture will relieve the suffering in many cases of neuralgia which are unconnected with structural disease of any part; but it is more than probable that the relief will be only temporary, unless appropriate constitutional means are employed at the same time.—*Rev.*

M. Biot on the Diagnosis of Diabetes Mellitus by the Optical Appearances of the Urine.[1]—M. Biot, the distinguished natural philosopher, informs us that, Dr. Mandl having inquired of him, if by the observation of the rotatory power the presence of sugar could be detected in the urine, he has performed numerous experiments with this view on the urine of patients labouring under diabetes mellitus. Chemistry enables us to obtain from such urine a substance, which is fermentable, and whose characters of solubility, of fusibility, and of crystalline appearance, are in every respect quite identical with those of solidified sugar from the grape, and of that produced by the prolonged action of sulphuric acid on starch. Now this fermentable matter, so obtained, is sometimes sweet or saccharine to the taste, and at other times it is altogether insipid. Hence some authors, as M. Bouchardat, in his excellent memoir in the Revue Medicale for June, 1839, have been inclined to conclude that there are two kinds of sugar in diabetic urine—one sapid and the other insipid. It is, however, more probable that tastelessness of the fermentable extract is owing to the union of the saccharine substance with other ingredients of the urine, such as the lactate of urea, the chloride of sodium, and extractive matter: this opinion is confirmed by the results of optical examination. For the purification of the insipid product, by repeatedly washing it with alcohol, leaves as a residue a sapid sugar, which is quite analogous in appearance with the sugar of fecula, susceptible of fermentation like it, and which exercises a rotatory power of the same character.

"My first care," says M. Biot, "was to ascertain if healthy urine ever presented traces of rotatory power. The result of my observations has been that it does so never, or at least very rarely, and then accidentally and scarcely perceptible. I long ago satisfied myself that urea, which enters so abundantly into the composition of healthy urine, exhibits no appreciable rotatory power. I had also found in diabetic sugar a rotatory power of the same kind (de meme sens) and of the same intensity as the sugar of starch—a fact which accords with the identity of ponderal composition, which chemistry attributes to them."

. . . . . "I examined the urine of a diabetic patient under the care of M. Breschet. He had been for some time subjected to a diet of animal food chiefly, and had derived so much benefit from it, that he was considered to be on the road to a recovery, although still affected with *diabetism.* His urine exhibited a power of considerable rotation, directed towards the right hand of the observer, consequently in the same direction as the solid sugar of diabetic urine obtained by evaporation. Its deviation, observed immediately with the naked eye through a tube of 347^{mm}, 6 in length, was + 10°, 6.[2] . . . . In a case under the care of M. Rayer, the rotatory power of the urine, observed in a tube of the same length, exhibited a deviation to the right hand of 18° 5. This urine contained nearly twice as much saccharine matter as that of M. Breschet's patient. If this sugar might be considered as free, or as combined with substances which do not alter its rotatory power, the urine must have contained from 110 to 120 *grammes* in the *litre*—a proportion which does not exceed what M. Bouchardat has met with in extreme cases of the disease.

"But to estimate in this way, with exactitude, the ponderable quantity of saccharine matter by the mere extent of the deviation observed through a liquid medium, it is necessary that the two conditions now specified should have been previously determined by the chemist. It is for this reason that, until such analytical examination has been made, I restrict myself at present to merely suggesting the optical diagnosis as a means of comparison."

M. Biot then mentions some other circumstances, which confirm the opinion that diabetic sugar is strictly identical with that obtained from fecula.

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[1] Medico-Chirurgical Review, July, 1841, p. 203.

[2] We give these figures as they stand in the French memoir, as we might commit an error in reducing them to an English standard.

. . . . . "M. Rayer's patient was seized with a pneumonia, while under treatment for the diabetes. The animal diet was, therefore, obliged to be suspended. The urine, under the influence of the inflammatory action, became of a deeper colour, and was found to contain much less sugar. Five days after the invasion of the inflammatory symptoms, and seven days after the suspension of animal food, the urine was found to exhibit no traces whatever of rotatory power: consequently all secretion of sugar had ceased.

"How much more easy it would have been to have treated this case, had the poor fellow come to the hospital at the commencement of his disease, when the simple inspection of his urine might have proclaimed at once the danger of his situation!

"In another case from the practice of M. Rayer, that of a child in whom there was a copious diuresis, accompanied with extreme thirst, &c. I examined the urine optically, but could not discover any sign of rotatory power. Now on evaporating it, we found that there was exceedingly little residue left, and that this was not fermentable. The optical and the chemical examination corresponded, therefore, in their results. It is, without doubt, easy in such a case to ascertain the nature of the urine by evaporating it, and testing the residue; but it is still more easy to introduce some of the urine into a tube, and arrive at the same conclusion by simple inspection."

M. Biot suggests to physicians, that by following this plan, the optical examination of the animal fluids, they might ascertain whether the serum of the blood, &c. in diabetes contains any free saccharine matter. He has already found that the serum of healthy fluid has a rotatory power directed to the left hand—in consequence of its containing albumen, which acts in this direction. If the serum contained any sugar, we may expect that its rotatory power should be considerably weakened, or perhaps altogether changed. A similar occurrence may be expected in the urine itself, when it has become albuminous. These are questions well deserving the immediate attention of the scientific physician.

M. Biot concludes his remarks with these words:—

"The optical characters of the urinary secretion will furnish an easy, sure, and exact means of diagnosis, to enable us to ascertain in a moment its diabetic condition. In this way, we may recognise the commencement of the disease from its earliest stage, detect at once its different peculiarities, and follow it through all its phases. It will then be easy to discover the immediate effects of regimen and diet, as well as of any medicinal agents that may be administered."—*Gazette Medicale.*

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Art. I.—NOTE ON A CASE OF EXPOSURE OF THE VENTRICLES OF THE LARYNX.

BY THE EDITOR.

Through the kindness of Dr. Ashmead, our colleague in the Philadelphia Hospital, we had an opportunity of examining a case in which the larynx had been freely opened, some time ago, with the object of committing suicide. Adhesion had taken place between the edges of the posterior part of the wound, but the aperture anteriorly was sufficient to allow the inferior ligaments to be distinctly seen. The original wound appeared to have passed immediately through the ventricles of the larynx; and in the process of cicatrisation, considerable deposition had taken place anteriorly, so that the ligaments of the glottis are not left free to vibrate.

The following observations were made at our visit, and were noted by Dr. Selden, one of the resident physicians of the institution. They were confirmed at a subsequent visit with Dr. Pennock and Dr. Lakey, of Cincinnati.

First, The arytenoid cartilages approach during expiration and separate on inspiration, when the breathing is quiet. When it is agitated, they approach and recede irregularly.

Secondly, During deglutition, whilst the larynx rises under the base of the tongue, the opening of the glottis—*rima glottidis*—is completely closed by the contraction of the intrinsic muscles of the larynx.

[It was manifest, that this action must totally prevent the entrance of substances into the trachea during deglutition.]

Thirdly, When odorous substances were held to the nose—the aperture of the throat being open—their smell was correctly appreciated; but by no means as distinctly as when the aperture was closed.

[Perrault, Lower, and Chaussier found, that by making an opening into the trachea of an animal, smell was not effected, and that dogs, which were the subject of the experiment, readily ate food they had previously refused.]

Fourthly, During the production of voice, whilst the aperture was left free, the voice was exceedingly raucous and indistinct. When the aperture was closed, it was still very raucous, but the words could be distinguished.

In the production of all vocal sounds, the glottis appeared to be almost entirely closed. When the aperture was free, the simple vowel sounds could not be distinguished from each other; but the letter I, which is a diphthong, could be discriminated from the rest.

[The great indistinctness of the sounds, when the aperture was open, appeared to be mainly owing to the tumefaction described above as existing anteriorly, and which acted, to a certain degree, as a damper to the vibrating cords. When the aperture was closed, and the air passed immediately upwards, greater freedom of vibration was permitted, and the different sounds were more appreciable.]

Owing to the tumefaction of the parts, no satisfactory observations could be made on the condition of the vocal cords in the production of grave and acute sounds.

ART. II.—REPORT ON BILLS OF MORTALITY.[1]

The proper mode of framing public registers of deaths was pretty fully considered by a committee of the British Association, which was appointed at the meeting held in this city, in 1834, and reported to the subsequent meeting of the Association in Dublin, in 1835. At that time, "the Act for Registering Births, Deaths, and Marriages in England," was only in contemplation, and it was expected that a similar Act for Scotland would be introduced into parliament. The English Bill became law in 1837, but the Scottish Bill, in consequence, as is said, of the opposition made to it by the parish-clerks throughout the country, has been hitherto postponed. It seems hardly possible, however, that the numerous benefits which our sister-country derives from an effective system of registration, should not, within a reasonable time, be extended to Scotland; and it may be hoped that the recent decided expression of opinion by the Statistical Section of the British Association, respecting the importance of the measure, will contribute to this end.

It is obviously of importance, therefore, that the attention of the profession in Scotland should be again directed to the subject of the registration of deaths, and to the advantages, as regards not only the interests of the public, but the progress of medical science, which may be expected to result from a well-regulated system of registration; and this more particularly, as the plan of keeping such resisters, introduced by the English Bill, (which is considerably different from that previously recommended by the Edinburgh committee,) and the statistical nosology recommended by the registrar-general, for the use of practitioners in filling up the returns of the causes of death, appear to your committee liable to serious objections.

With two observations, contained in the letter on Statistical Nosology, prefixed to the table of diseases drawn up by Mr. Farr, and both of which are contained in the Remarks on the Registration of Deaths, that were laid before the British Association by the sub-committee formed at Edinburgh in 1834, all must concur.

The *first* of these relates to the importance of retaining the old division of diseases into *plagues* and *sporadic diseases*, or in other words, into, *1st*, those diseases which are confined to limited districts and limited periods—

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[1] Report of a Committee of the Royal College of Physicians of Edinburgh, appointed to consider the best mode of framing Public Registers of Deaths. (Approved by the Royal College, February 17, 1841.)—Edinburgh Medical and Surgical Journal, July, 1841, p. 140.

which are either endemic or epidemic; and *2d*, those which proceed from causes acting pretty uniformly on every large mass of mankind, and which are found accordingly, although influenced by climate and season, to prevail more or less, and to produce a larger or smaller annual mortality, in all countries.

This distinction at once recommends itself to the common sense of mankind, and perhaps the most correct scientific account we can give of it is by saying, that one class of diseases is the result of specific poisons, of various sorts, introduced into the animal economy, and the other of morbid actions, excited by causes which are very generally applied, and are not necessarily deleterious in their effects. But the allocation of individual diseases, in one or other of these great divisions, is attended with difficulty, and the plan adopted in the English table is in several respects unsatisfactory.

The *second* of the two observations referred to, is that, in sporadic diseases, it is generally easier to distinguish the region, or even the organ, primarily and chiefly affected, than to ascertain the precise nature of the disease. The importance of this observation appears to your committee not to have been sufficiently appreciated in forming the registration lists of diseases for England; and to suggest the only distinction that ought to be observed between a statistical nosology, and a nosology for the use of schools of medicine.

To these we would add only one other preliminary observation, which is the foundation of the criticism to be offered on the tables of the causes of death, drawn up by Mr. Farr, and used in the returns under the English Registration Bill, viz.—That in constructing such returns, it is better to *acknowledge ignorance*, than to run the risk of *proclaiming error*—better to rest satisfied with a smaller amount of information, of which we can be absolutely certain, than to attempt to procure a larger amount, at the risk of the facts being so much blended with opinions, as to make numerical statements a possible source of misapprehension and erroneous doctrine.

It is to be observed, that certain articles of information in regard to all the deaths that occur in a district, may be accurately and uniformly given in the registers, and be of much importance in various medical inquiries (because enabling us to construct tables illustrating with certainty the influence of various causes on health,) altogether independently of any medical opinions as to the causes of death; viz. the age, the sex, the precise date of death, the occupation of the deceased person, or that of the head of the family to which he belonged, the precise locality of his residence, the part of the body chiefly affected by the fatal disease, and, in a general way, the duration of his disease. The report of the Edinburgh sub-committee laid some stress on the importance of all registers containing details on the two last of these heads; and suggested, that all the deaths should be ranked as depending on acute or chronic diseases, according as the patient should have been known to be ill, and disabled for his ordinary occupations for less or more than *six weeks* before death. We regret to perceive no evidence that effectual provision is made in the registers kept under the act now in force in England for any of the last mentioned points being uniformly and regularly ascertained.

In proceeding farther, it must always be kept in mind, *first*, That to a very large proportion of the deaths registered, no report of the cause of death, by a medical man, will be annexed; and, *secondly*, That such a report, when given, unless much care be taken, may very often be founded in a great measure on opinion, not on ascertained facts. But, conformably with the principles above laid down, it is desirable that all the cases of sporadic diseases should be entered according to the seat of what was regarded as the chief affection—as acute or chronic disease of the *head*, of the *chest*, of the *stomach* or *bowels*, (including affections of the liver and other chylopoietic viscera,) of the *urinary organs*, of the *genital organs*, of the *bones* or *joints*, or of *external parts*. This may be done, as was observed by the committee of the Association, without any report by a medical man; but it will of course be done with more accuracy by medical practitioners. Farther, it would be desirable that the accurate specification of the organ, or the more precise name of the disease, should be given *only when furnished by a medical practitioner*, and should be stated in a separate column; and that practitioners should be requested to specify the name only in those cases in which they can announce it with confidence and precision. Thus we might have, *e. g.* one hundred cases of death reported as resulting from diseases of the chest, forty of these marked as acute cases, and of these forty, perhaps only ten would be named; but the names given, being in conformity to instructions, as simple as possible, issued to all medical men, and to none others, would be understood alike by all, and therefore be deserving of confidence.

Thus we should have in every register of deaths, two distinct columns—the one to be filled up in all cases, the other only in some cases, from which, of course, two lists may be at any time made up, the first illustrating many important points relative to disease, although containing no nosological name; the second affording as good security as the state of medical science and medical instruction permits, that the names of diseases given in it are given uniformly, and applied similarly in all parts of the country. Each of these columns would be subdivided in the way to be afterwards mentioned.

The construction of the list of diseases, to be recommended by authority to all practitioners, is the subject of greatest difficulty connected with the registration of deaths, and that in which the plan adopted in England seems liable to the greatest objection. But we regard it as a fundamental principle, that practitioners should be strongly advised rather to content themselves with stating the seat of the disease causing death, and its course as acute or chronic, than to affix a name to it, without possessing certain evidence, from examination of the body or other unequivocal indications, of the name they affix being the right one.

The importance of this caution appears from the tables published in England. We do not refer to the whole list of diseases, about 180 in number, given under the name of Statistical Nosology, which seems very deficient in simplicity, (comprising, for example, six distinct names for varieties of the continued fever of this country,) but would refer particularly to the abstract of the causes of death in the registers contained in page 120 of the first report. The names there given are certainly a great improvement on the ancient bills of mortality; but we think it easy to show that the objections justly urged by Mr. Farr against the old nomenclature, that "each disease has been denoted by different terms, and each term applied to different diseases—that vague, inconvenient names have been employed, and complications been registered instead of primary diseases"—have been by no means uniformly avoided.

The first objection which occurs to us to this "abstract of the causes of death," is, that cholera, (distinguished from the Asiatic or malignant cholera,) croup, diarrhœa, thrush, dysentery, and erysipelas, are all set down among the plagues, *i. e.* the epidemic, endemic, and contagious diseases. We submit that the three first of these should be excluded from this head of diseases altogether; and this more especially as, besides 1655 cases of croup, ranked among the epidemics, we have, under the head of sporadic diseases, in the same table, 24 from laryngitis and 289 from quinsy. We apprehend that it would be much simpler, and more scientific, to have all these ranked together, in the first instance, as acute diseases of the windpipe, and very much doubt if any advantage is to be derived from more minute distinctions among them.

Again, we have, among the epidemic diseases, 460 deaths from cholera, 2755 from diarrhœa, and 675 from dysentery; and then we have, among the sporadic diseases, 170 from ulceration of the bowels, 3396 from gastro enteritis, and 853 from disease of the bowels, besides 437 from tabes mesenterica, and 1963 from teething. We think it obvious here, that different names, and even different places in the system, must have been repeatedly given to the same diseases; and that all scientific purposes would have been better served, and with less chance of any erroneous inference, if the whole of these had been classed together as sporadic diseases of the intestines, acute or chronic, according to their duration; and if more specific names had been given only to a small proportion of them, under the caution already stated, that such names should be given only in those cases where practitioners are certain of their being rightly applied.

In regard to aphthæ, dysentery, and erysipelas, we consider these diseases as being, in the greater number of instances which occur in this country, distinctly sporadic; and although we agree to the propriety of ranking some cases of each of these diseases among epidemic or contagious diseases, yet we think this should only be done, and that practitioners should be warned only to do it, when successions of cases have occurred within such narrow limits, both of space and time, as clearly to indicate the operation of some local and temporary cause; and in this case the term epidemic should be prefixed to the name of the disease. With this caution, we cannot doubt that the epidemic peritonitis, or puerperal fever, must likewise be occasionally added to this class of diseases.

Another important observation with regard to epidemic diseases is, that practitioners should be warned not to apply the terms fever or typhus, without prefixing, and being satisfied of the right application of, the term contagious or epidemic; because it is certain that at present the name fever is given to many febrile diseases, particularly of children, which are quite distinct from the continued fever, justly ranked as the most important of the epidemic diseases of this country.

Thus the first class of diseases—the epidemic, endemic, and contagious—will be reduced, except on occasion of uncommon epidemics, to the following, which all admit to be strictly of this character—epidemic, influenza, small-pox, measles, scarlatina, hooping-cough, epidemic continued fever, intermittent fever, syphilis, and hydrophobia.

The first group of sporadic diseases in the English register consists of those of the nervous system, and the number of deaths in six months, referred to this head, is 21,873, of which only 764 are marked simply as disease of the nervous system; all the rest have names assigned to them, and no fewer than 10,729 are named convulsion, besides which there is a separate head of epilepsy, comprising 570, and 4591 are recorded as cephalitis and hydrocephalus. It is obvious here, as, indeed, Mr. Farr has stated, that cases of various "undeveloped diseases, and the *results* of different diseases," many of these truly of the epidemic class, have been ranked as convulsions. If it were an instruction to medical men to avoid entering simply as convulsions, those cases which occur as a symptom or sequela of other diseases, this fallacious item in this great family of diseases would be rapidly diminished.

Instead of making separate heads of cephalitis and hydrocephalus, (the distinction between which will certainly not be understood alike by all practitioners,) we would greatly prefer using the general term inflammation of the brain or its membranes; observing, of course, the usual division of cases into acute and chronic, and making a separate entry of those cases which practitioners can accurately distinguish (by dissection)—as inflammation of the membranes, inflammatory softening of the brain, or acute hydrocephalus; to which should be added a record of those cases, whether acute or chronic, which can be distinguished as of a scrofulous or strumous character—of which, of course, the best characteristic is the existence (ascertained in like manner) of tubercular deposits.

In regard to apoplexy and palsy, it is obvious that, in a pathological view, the distinction of these from one another, is not nearly so important as the distinction of either the one or the other, according as it has been produced by inflammation, or by rupture of a vessel, or by organic disease, or independently of any of these. These distinctions may easily be marked by practitioners, and the record of them will be useful, provided only that they have been ascertained beyond doubt by the appearances after death.

Thus the general distinction, and the only one uniformly observed under this head, will be into acute and chronic diseases of the brain, spinal cord, and nerves; and under each head we shall have a certain number of cases accurately distinguished—as inflammation, simple or scrofulous, apoplexy or palsy from inflammation or softening, from effused blood, from organic disease, or without obvious cause. Among the acute diseases we shall have idiopathic convulsions; among the chronic, habitual epilepsy, a certain number of cases of which, dependent on organic disease, will also be marked. The remaining diseases of this class contained in the abstract, and to be distinguished by practitioners, tetanus, chorea, insanity, and delirium tremens, demand no comment.

The diseases of the heart and lungs are so often combined, and it is often so difficult even for a medical man to point out the part primarily and chiefly diseased, that we are convinced the attempt to separate them in all cases, in statistical tables, can lead to no result on which reliance can be placed. We would therefore recommend that there should be no other general distinction of these diseases, than that into acute and chronic diseases of the chest, and the names of pectoral diseases, which seem proper for the guidance of practitioners in the more accurate specification, under those two general heads, are the following:—

Inflammation of the Larynx or Trachea.
Bronchitis.
Bronchitis with Asthma.
Pneumonia.
Pleurisy with large fluid effusion, (*i. e.* Empyema.)
Consumption of the Lungs, (Tubercular.)
Other organic disease of the Lungs.
Organic disease of the Lungs with Dropsy.
Inflammation of the Heart.
Organic disease of the Heart.
Organic disease of the Heart with Dropsy.
Thoracic Aneurism.

The greatest difficulty respecting these diseases is, how to place those cases to which practitioners will be apt to give the vague names of asthma and hydrothorax. The former is probably always an attendant, although in certain constitutions only, on bronchitis, and seems to be almost always the cause of emphysema of the lungs; and even when this last affection has become complicated, as in the natural course of things is very often the case, with hypertrophy of the right side of the heart, enlarged liver, and dropsy, still the part *primarily* affected may be said to be the bronchia. But the best mode of registering such complex cases will be considered presently.

It is obvious that dropsies ought to be distinguished by the seat of the disease producing them, not by their own seat; and therefore that the proper distinction of cases terminating in this way is into dropsy from diseased lungs, from diseased heart, from diseased liver, from diseased kidney, and from diseased ovary, perhaps we might add, from diseased pleura, and from diseased peritoneum. It is certain, that, in a majority of dropsical cases, organic disease of more than one internal part exists, and is concerned in producing the effusion; still we are anxious to point out the importance of observing, as carefully as possible, the organ primarily and chiefly diseased, (*e. g.* whether it is the heart or the lungs that has first and chiefly suffered,) before registering the disease.

The list of diseases of the intestinal canal, and the numbers reported of deaths, as produced by them during the first six months of registration in England, are as follow:—

Teething,	1903
Gastro-Enteritis,	3396
Peritonitis,	82
Tabes Mesenterica,	487
Ascites,	51
Ulceration,	170
Hernia,	252
Colic,	58
Constipation,	461
Worms,	264
Disease of Intestines,	853

in addition to above 3800 deaths by diarrhœa, dysentery, and cholera, placed among the plagues.

With regard to this table, we do not think it is going too far to observe, that it would have answered all scientific purposes much better, to have classed the whole of the cases referred to, with the ages of the patients, simply as acute or chronic diseases of the stomach and bowels; all the attempts made in it to give them more specific names, being at least as much calculated to mislead as to instruct. Thus, the two first and largest items in the enumeration ought to be struck out altogether, for teething, although often a cause of fatal disease, is not properly styled a cause of death;[1] and what is properly meant by gastro-enteritis, as distinguished on the one hand from continued fever, and on the other from peritonitis, diarrhœa, dysentery, and ulceration of the bowels, we must profess ourselves quite unable to understand.

It would, it is conceived, be much better, ranking all these cases under the general heads of acute and chronic diseases of the alimentary canal, to direct the attention of practitioners to the following more particular names, to be given only to those cases to which they are sure of their being truly applicable:—

Peritonitis.
Inflammation of Mucous Membrane of Intestines, (with its Sequelæ.)
Dysentery.
Idiopathic Diarrhœa.
Cholera.
Scrofulous or Tubercular Diseases of the Intestines or Glands.
Other Organic Disease of the Stomach or Intestines.
Do. with Dropsy.
Hernia.
Obstruction of Bowels, (*i. e.* without Inflammation or Organic Disease.)

In regard to the list of diseases of the liver, under the distinction of acute and chronic, there should be a distinct head of inflammation, (and its sequelæ,) one of granular disease, (or cirrhosis,) one of other organic disease, and one of jaundice without organic disease. We would register dropsy along with the different heads of chronic disease of the liver, when it is present, but would annex a caution that, when organic disease of the liver is found in connection with organic disease of the heart or lungs, it should not in general be regarded as the primary or most essential disease. Thus, many of the cases in which dropsy is combined with liver disease, would be referred to the original and fundamental change of structure within the chest, on which both are in fact dependent.

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[1] The same observation applies to worms.

We regard Mr. Farr's abstract as an improvement on the general table recommended by the sub-committee of the British Association, in so far as it makes separate heads of diseases of the urinary organs, and of the organs of reproduction, distinct from those of the abdominal viscera, because most of the diseases of these two sets of organs may be referred to their place in nosology, even by those who have had no medical instruction.

But there is considerable difficulty as to the arrangement of those numerous cases of dropsy which are now known to depend in part, and often most essentially, on granular disease of the kidneys. That the importance of this disease is altogether overlooked in the returns made in England, and, indeed, that the classification of dropsical diseases is quite unsatisfactory, appears from this, that while 995 deaths (occurring in the last six months of 1837) are ascribed to hydrothorax, and only 51 to ascites, we have 5584 ascribed to dropsy of uncertain seat, and only three to granular disease of the kidneys; but how this confusion and ambiguity are to be corrected, is a more difficult question. We would suggest that practitioners should be advised to set down, as cases of granular disease of the kidneys, all cases in which the urine is permanently of low specific gravity, and coagulable by heat and acids; and then, that cases of this description, as attended by dropsy, by coma, or by diarrhœa, which seem to be the most usual modes of fatal termination of this disease, should be farther distinguished. There will, of course, be a number of cases of dropsy dependent on granular kidney, which will not be included under this head, their nature not having been determined by practitioners. These will appear as dropsies of uncertain seat, or as diseases of the head or of the bowels; but as this disease of the kidneys does not make itself known by any symptoms manifestly referable to the urinary organs, it seems impossible to have a record of its frequency extending even to all the cases which are reported by practitioners.

We think there can be no doubt as to the propriety of removing diabetes from this head of the nosology, and classing it among diseases of uncertain seat; and likewise, that the general term ischuria, should not appear in the list of diseases reported by medical men, but that cases of that kind should be reported as diseases either of the kidneys, bladder, prostate gland, or urethra.

In regard to the diseases of the organs of reproduction, included in Mr. Farr's list, we have only to observe, that the fact of the deaths of females from diseases of this class, independently of parturition, being only 150 in 148,700 deaths, is sufficient evidence that many of the deaths which should have been ranked here, if they had been correctly understood, have been ascribed to other causes.

We think the classes of diseases of the organs of locomotion, and of the integumentary system, may be most simply designated as diseases of the bones and joints, and of external parts, and that several of the diseases stated as of uncertain seat, should be ranked here. It seems quite incorrect to enumerate, as of this last class, cases of inflammation, of hemorrhage, of abscess, of mortification, of scrofula, carcinoma, or tumour; the seat of every case of which must be known, if the disease is truly recognised.

After the head of abscess, that of ulcer, and that of diseases of the joints, there should be another head entitled scrofulous do., and by means of this and of the names already suggested, scrofulous diseases of the brain, lungs, and abdominal viscera, we shall have a fair view of the extent of the mortality from scrofulous diseases, as compared with that portion of the whole mortality on which there are accurate reports.

Perhaps the only diseases which ought to be ranked as of uncertain seat, should be gout—dropsy, when the cause is obscure—diabetes, scurvy, purpura, and debility from unknown cause.

Thus, the list of sporadic diseases, according to which we should wish those cases, to which any specific names are given, to be arranged, would stand thus:—

Inflammation (acute or chronic) of the Brain.
Do. with Scrofula.
Do. of Spinal Cord.
Apoplexy or Palsy (acute or chronic) from effused blood.
Do. from Inflammation or Softening.
Do. from Organic Disease.
Simple Apoplexy.
Idiopathic Convulsions.
Epilepsy.
Chorea.
Tetanus.
Insanity.
Delirium Tremens.
Neuralgia.
Inflammation (acute or chronic) of Larynx or Trachea.
Do. of Mouth, Tongue, or Fauces.
Acute Gangrene of Do.
Cancer of Do.
Bronchitis.
Bronchitis with Asthma.
Pneumonia.
Pleurisy with large fluid effusion, (or Empyema.)
Consumption of the Lungs, (tubercular.)
Organic Disease of the Lungs, (not tubercular.)
Do. with Dropsy.
Inflammation of Heart.
Do. from Rheumatism.
Organic Disease of Heart or great vessels.
Do. with Dropsy.
Peritonitis.
Inflammation of Mucous Membrane of Bowels.
Dysentery.
Diarrhœa, (Idiopathic.)
Cholera.
Obstruction of Bowels.
Tubercular Disease of Intestines or Glands.
Organic Disease (not tubercular) of Stomach or Intestines.
Do. with Dropsy.
Hernia.
Inflammation of Liver.
Granular disease of Liver, (or Cirrhosis.)
Do. with Dropsy.
Other organic disease of Liver.
Do. with Dropsy.
Jaundice (without organic disease.)
Organic disease of Pancreas or Spleen.
Inflammation of Kidneys.
Granular disease of Kidneys, with Dropsy.
Do. with Coma.
Do. with Diarrhœa.
Urinary Calculus.
Ischuria Renalis.
Inflammation of the Bladder.
Organic disease of Bladder.
Do. of Prostate Gland.
Do. of Urethra.
Do. of Testis.
Inflammation of Uterus.
Cancer of Uterus.

Other organic disease of Uterus.
Do of Ovary.
Cancer of external parts.
Inflammation (acute or chronic) of the surface of the Body, (including Abscess, Ulcers, Erysipelas, Carbuncle, Chronic Cutaneous diseases.)
Do. with Scrofula.
Inflammation of Joints or Bones.
Scrofulous disease of Joints or Bones.
Other organic disease of do.
Gout.
Dropsy from uncertain cause.
Diabetes.
Hemorrhage from uncertain cause, (seat to be stated.)
Scurvy.
Purpura.
Debility (including deaths from old age.)

But when we consider the very large proportion of fatal cases in which a complication of diseases exists, and the importance of recording as much as possible of the causes tending to the fatal event, we are decidedly of opinion that it is impossible to obtain the whole pathological information which such registers, in so far as they are filled up by practitioners, ought to convey, without a subdivision of the column assigned for the name of disease into two compartments, the one stating the "disease causing death," the other the "previously existing disease, if any," It is true, that different practitioners may arrange the information conveyed in those two columns differently; but as both columns will always be examined by any one wishing to obtain statistical information from them, this is of little importance.

The advantages of the plan which we propose for the keeping of these registers, will be best shown by the following schedule and examples:—

Date.	Name.	Sex.	Age.	Marr'd or Single.	Exact Residence.	Employment, or that of Head of Family.	Duration and Seat of Disease.		Name of Disease	
							Acute.	Chronic.	Causing Death.*	Previously existing, if any.
May 10	J. More	M.	27	S.	12 Potterrow	Tailor	Bowels	—	Dysentery	—
11	A. Jones	F.	40	M,	159 Cowgate	Husband, Blacksmith	—	Chest	Consumption	—
15	J. Brown	M.	50	M.	220 High St.	Labourer	Chest	—	Pleurisy	Epidem. Fever
16	M. White	F.	5	S.	30 George St.	Father, Shopkeeper	Head & Chest	—	Convulsion	Hoop. Cough
17	J. Smith	F.	60	M.	5 Rose St.	Shopkeeper	—	Chest	Dropsy	Org. Dis. of Ht. & Liv.
18	W. Reid	M.	43	M.	80 Grassmarket	Porter	Bowels	—	—	—
19	M. Forbes	F.	50	S.	20 Canongate	Washerwoman	—	Bowels	Diarrhœa	Gran. dis. of Kid.
20	J. Tod	M.	4	S.	30 High St.	Father, Writer	Head	—	Inflam. of Brain (Scrofa.)	—
21	M. Hay	F.	3	S.	2 Rose St.	Father, Servant	—	Chest	—	—
22	J. Bell	M.	65	M.	2 George St.	Servant	Head	—	—	—

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* The columns containing names of diseases, only to be filled up by medical practitioners, except in cases of death from notoriously epidemic diseases, such as smallpox or hooping-cough.

The only other observation which occurs to us on this subject is, that the tables of mortality abstracted from the register may easily be made to exhibit the differences of health of towns and districts of the country, more satisfactorily than those published in England. The importance of the data thus afforded, is very well stated by Mr. Lister, in his first report, as follows:—

"I have felt that it was of great importance, not only to give an abstract for the whole kingdom of England and Wales, but to exhibit the difference that prevails in different portions of the kingdom, to compare town with country, agricultural districts with manufacturing and mining districts, the hilly with the low and level, the maritime with the inland, the eastern and northern with the western and southern parts. Nor are these diversities matters of merely curious speculation, but may be made the source of important benefits, especially to the poorer classes. It was stated in evidence before the committee on parochial registration, in 1833, by the actuary of the National Debt Office, that the extent of difference which then existed was utterly unknown; that tables for the use of the poor, in reference to sickness and mortality, and in reference to the regulation of their friendly societies, could not then be constructed for two districts differing in character, from the want of such information as an improved system would afford; and that if two societies of poor men, residing in districts of a totally different character, were, at the same time, to apply to him for tables to guide them in preserving their societies solvent, he 'should be under the necessity of giving the same tables to both, though knowing perfectly that the rates which were adequate in one case, were inadequate in the other.' It was also stated to the committee on laws respecting friendly societies, by another eminent actuary (Mr. Milne), that no one table or scale of contributions can, with propriety, be adopted by all friendly societies; that one composed of members living in or near a manufacturing town, required a table very different from that which would be required in places where the population is less dense, and where a considerable proportion of the members are chiefly employed in the open air; but that these are differences which he could not 'pretend to estimate for want of *data*.' The useful principle of comparison may, if requisite, be carried out into a more minute system of subdivision than I have, in this first instance, deemed it necessary to adopt. But there was danger lest, in attempting a more subtle discrimination, we should lose sight of broad distinctions which it was important to observe; and it was necessary to remember, that to diminish by subdivision the number of facts on which calculation could be brought to bear, was materially to diminish their value. The extent to which division should be carried, is a question not to be decided by any established rule, and which necesarily admits of much diversity of opinion; and I have endeavoured (not unaided by judgments which I respect) to pursue a middle course between the opposite extremes of subdivision and condensation, dividing the kingdom into the twenty-five portions in which are exhibited abstracts of deaths at different ages."

According to the division thus adopted by Mr. Lister, the five largest towns in England, London, Manchester, Liverpool, Leeds, and Birmingham, are separated from the adjoining districts of country, and the mortality in each exhibited separately; but all the second-rate towns in England are united with the surrounding districts of country, and constitute but a small part of the population of the districts (containing from 200,000 to above 1,000,000 inhabitants) of which the mortality is given.

The deficiency of the information given by these tables, appears distinctly from attempting to compare the mortality in Edinburgh with that in any of the English towns. All the towns of which tables are given, separately from country districts, are commercial and manufacturing towns, and, therefore, not proper objects of comparison with Edinburgh. The English towns which resemble Edinburgh most, in the condition and occupations of their inhabitants, are Bath, Oxford, Cambridge, and some of the Cathedral towns; but we have no record of the mortality of any of these, disjoined from large districts of surrounding country.

In Scotland there are only seventeen towns, of which the population exceeds 10,000; and in order to have a fair exposition of the effects of town life, and of the mode of life in different towns, as compared with country districts, it would be of great importance that the mortality in all these should be stated separately from any country districts.

If these observations on the best plan for keeping public registers of deaths shall be approved by the Royal College, we would suggest that they should be made known, along with the earnest recommendation of the general principle of the measure by the Royal College, in whatever quarters may be thought advisable, in the view of aiding the object of obtaining a Registration Act for Scotland.

W. P. ALISON,
Convener of Committee.

ART. III.—CASE OF SUBACUTE BRONCHITIS, WITH PLASTIC TUBULAR SECRETION.

BY W. F. RANKING, M. D. CANT.,[1]

Physician to the Suffolk General Hospital.

Bury St. Edmunds, August 12, 1841.

I was summoned on the morning of the 2d of June last to meet Mr. Robinson, of Mildenhall, in consultation upon the following case:—

The patient, a gentleman, ætat. 20 years, of a nervo-sanguineous temperament, was seized on awaking by a paroxysm of coughing, accompanied by expectoration of sputa, tinged with blood. He had suffered three separate attacks, previous to the present one, of what was considered to be pure hæmoptysis, and dreaded accordingly as the forerunner of phthisis. He appears to have been for some time subjected to dyspnœa and palpitation upon exertion; and catarrhal attacks, to use his own expression, always "settled upon the lungs."

The first seizure of his present ailment occurred in January last, a second occurred in February, and a third in April, all of which yielded to topical bleeding and digitalis. The present attack came on rather unexpectedly; our patient having been noticed the day before to be in excellent health. The expectoration consisted of masses, which, upon casual observation, appeared to be mucus, tinged with blood, and was expelled by an effort more resembling "*hawking*" than cough. Upon more minute inspection, these sputa were seen to consist of a whitish membrane, distinctly tubular, and accurately moulded to the form of the bronchial tubes, even to their most minute ramifications. The consistence of these varied; in some portions the membrane was tough and opaque; in others thin, and raised into minute pouches by bubbles of air. The blood was small in quantity, and could be easily removed from these tubes by agitation in water.

There was little disturbance in the system beyond that produced by mental agitation; the appearance of the blood having given rise to the greatest anxiety both to the patient and his friends. The pulse was 80, and soft; the skin cool, and tongue natural; and there was little or no pain in the chest. I made a very careful stethoscopic examination relative to the existence of the tubercular deposit, but could not discover any grounds of apprehension. The chest was of an unusually round figure, and gave a clear sound on percussion throughout. The respiratory murmur was of an intensity almost puerile, and audible every where, with the exception of the neighbourhood of the larger tubes, where it was marked by a sibilous râle. There was considerable præcordial dulness, and extensive but not forcible impulse. There was less difference than natural in the "*timbre*" of the first and second sounds. "The diagnosis I formed from these was, subacute inflammation of the bronchial mucous membrane, with plastic secretion; many tubes obstructed partially by membranous deposit; and a dilated heart of less than average power."

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[1] London Medical Gazette, August, 1841, p. 832.

Under the impression that digitalis, which had been prescribed on former occasions, was not suitable to the state of the heart, I gave him internally the acetate of lead—a remedy which has been found so useful in bronchitis, by Henderson, guarded in the usual manner by acetic acid draughts: aperient medicine had been exhibited before my visit. Externally to the chest I applied the unguent. acet. potass. tart. The acetate of lead was suspended after forty-eight hours, and eight-grain doses of alum were substituted.

Under this treatment considerable amendment was perceptible on the third day, and by the end of the third week every unpleasant symptom had vanished.

The patient now remains in average health, and improves daily under a more generous diet than he had been allowed by his former medical attendant, and the daily use of tepid salt-water sponging, followed by friction with horse-hair gloves. Upon every tendency to catarrh, he applies the linimentum terebinthinæ to the chest.

The secretion of a membranous substance by the pulmonary mucous membrane is familiar to every one, as it occurs in croup; in fatal cases of which disease the bronchial tubes are often found to be filled with the same plastic material as is furnished by the lining membrane of the trachea. But the production of membranous secretion in the lungs of the adult, and unconnected with tracheal disease, must be considered as a rare event.

We have, however, several instances on record, by Barthollini, Ruysch, Tulpius, and Morgagni, under the names of bronchial polypus and bronchial worms.

Hippocrates,[1] also, probably witnessed something of the kind in the case of Phericides, whom he describes as spitting up "*γαλακτώδεα*," "white milky substances."

Dr. Bergen, of Frankfort on the Maine, has left us a description of an epidemic catarrh, accompanied by the expectoration of membranous tubes, which occurred in 1759. "Hanc tristem experientiam in propriâ filiâ feci, in quâ hoc singulare simul se obtulit phænomenon, quod ante mortem, tussi et screatu rejecerit tubulum membranaceum. Hunc tubulum judico esse portionem membranæ tubulosæ per ramos bronchiorum, durante morbo, generatæ."

Another case is related by Dr. Warren,[2] who is generally thought to be the first person who has given an accurate description of the disease. It will be seen, however, that he did not entertain any more concise ideas concerning it than Berger, who preceded him by many years. The case is as follows:—

A girl, æt. eight years, of strumous habits, was suddenly seized with dyspnœa and cough, which yielded to medical treatment. At the end of six weeks she had a second attack, accompanied by night sweats; the symptoms ceased upon the expectoration of what Dr. Warren calls "a large polypous concretion." The girl suffered several relapses, but was at length freed from them entirely by the formation of an abscess, connected with caries of the os calcis.

Baillie had never met with a case of what he calls "*bronchial polypus*," but had seen preparations of it.

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[1] **De Morbis Popular, lib. vii. ss. xli.**

[2] **Med. Trans. vol. i. art. 16.**

Cheyne describes two forms of "bronchial polypus;" one of which is evidently nothing more than the fibrinous portion of blood effused into the bronchial tubes. The instance given by Laennec, as occurring in the progress of a case of phthisis, was of the same nature.

Dr. Casper[1] has published the case of a girl, æt. twelve years, also of strumous constitution, who, in the course of inflammatory catarrh, coughed up "a whitish yellow polypous body, of a tenacious character, and corresponding to the bronchial ramifications."

A case will be found in the Med. Repository, vol. xviii, by Mr. Iliff, and also in a memoir read before the Royal Academy of Medicine, on obliteration of the bronchial tubes, by M. Reynaud.

The last case I shall mention, is one published by Dr. Starr,[2] of Daventry, under the denomination of "chronic croup," and which exactly resembles the case of my patient. A girl, ætat. 22 years, complained of pain in the chest, with a sense of general oppression. Membranous tubes accurately moulded to the bronchial tubes, and, as in my case, tinged with blood, were expectorated. The blood was doubtless effused from small vessels, ruptured in the exertion necessary to dislodge the tenacious sputa. Authors are far from agreeing as to the precise pathological condition of the bronchial mucous membrane which gives rise to the plastic secretion. There are two principal and opposite opinions; one, which attributes the production of membrane, instead of the ordinary more fluid secretions of inflamed mucous tissue, to the existence of a high degree of irritation; another, which ascribes the phenomenon to an excess of the albuminous constituent of the blood. The generality of writers are in favour of the first opinion; the latter is embraced, among others, by Copland.[3] The question is discussed at some length by Andral,[4] by whom it is decided that a high degree of irritation is not sufficient *per se* to cause the secretion of plastic membrane; but that there must be, in addition, some special conditions of innervation or sanguification.

It appears to me that neither of these opinions is the correct one, and that the true explanation is still to be sought for. If the more frequent formation of plastic membrane in children than in adults be due to the existence of a larger quantity of albumen in the blood of the former, then ought we to see such productions the common consequence, in them, of inflammations of the mucous tissues. Such, however, is not the fact. One half, at the least, of the diseases of infancy and childhood, consist of irritations, of greater or less intensity, of the pulmonary and gastro-intestinal mucous membranes. Yet in cases only of croup and diphtherite do we see the production of plastic membranes—cases which, numerically considered, are rare.

The same objections hold good against the opinion which refers this peculiar secretion to the intensity of the vascular excitement. If the degree of irritation were the true cause of such secretion, we ought to see it more frequently among the numerous cases of bronchitis and gastro-enteritis which present themselves to our notice. In our patient, as well as in that of Dr. Starr, every symptom opposed the idea of high vascular excitement; yet was the formation of the membrane of the most perfect kind.

It is, however, in this as well as in many other points connected with our difficult science, far more easy to find objections to any particular opinion, than to frame a better; nor in the present instance do I pretend to do so.

The treatment pursued, was directed by the two following indications:—1st, To allay the existing irritation; 2d, To prevent its recurrence. The first end was accomplished by counter-irritation, and the internal use of the acetate of lead and alum, the sedative and astringent properties of which restored the bronchial capillaries to their normal condition. The second I hope to accomplish by judicious regimen, by sponging and friction of the chest, combined with the constant use of flannel, and by having recourse to cuticular irritation upon the slightest occurrence of catarrhal symptoms.

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[1] Wochenschrift für die Gesammte Heilkunde.

[2] Medical Gazette, Feb. 7, 1840.

[3] Vide art. Croup, Copland's Dictionary.

[4] Anatomie Pathologique, p. 484.

BIBLIOGRAPHICAL NOTICES.

Allen's Essay on the Connection of Mental Philosophy with Medicine.[1]

The subject, chosen by Dr. Allen for his inaugural essay, is excellent. It cannot be too strongly pressed upon the attention of the student who is desirous of excelling in his profession—that success, satisfactory to himself, can only be attained by a rigid study of the connection between cause and effect; and on this account we have been in the habit of recommending to the tyro, as well as to the farther advanced student, the perusal and reperusal of Abercrombie's interesting work on the Intellectual Powers, and the adoption of the excellent precepts inculcated by him.

Dr. Allen's design, in the Essay before us, appears to be twofold: *first*, to show the importance of the connection between mental philosophy and medicine; and *secondly*, to bring prominently forward the subject of which he has been, for some time, the able advocate in the pages of the Phrenological Journal.

On the importance of the connection of this subject with medicine, he and ourselves may entertain very different opinions; but we doubt not, that when a few years have passed over our heads, our sentiments will not be so widely apart. Be this, however, as it may, we can commend Dr. Allen's Essay for its style; and likewise for its freedom from that morbid excitement, which appears to exist in the writings of many amiable persons, when they touch upon a subject that is even remotely controversial.

Graves's Clinical Lectures.[2]

It has been not a little gratifying to us to find, that some of the works originally published in this Library have been considered to warrant a second edition, and that one of them has reached a third. The volume before us is not one of the least worthy of those; and its value has been enhanced by the additional lectures added by Dr. Gerhard. They are the republication of "a few of the Clinical Lectures given by him at the Philadelphia Medical Institute and at the Philadelphia Hospital, as a part of the Clinical Course of the University of Pennsylvania." The main subjects of these additional lectures are—Acute articular rheumatism, Pleurisy, Tubercular peritonitis,

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[1] An Essay on the Connection of Mental Philosophy with Medicine. By Nathan Allen, A. M., M. D., Editor of the American Phrenological Journal and Miscellany.

[2] Clinical Lectures by Robert J. Graves, M. D., M. R. I. A., Professor of the Institutes of Medicine in the School of Physic, Trinity College, Dublin, &c. Second American edition, with Notes and a Series of Lectures. By W. W. Gerhard, M. D., Lecturer on Clinical Medicine to the University of Pennsylvania, &c. &c.

Pericarditis, Endocarditis, Tubercular meningitis, Chronic meningitis, apoplexy, Paralysis of the insane, Delirium tremens, Dysentery, Phthisis pulmonalis, Pneumonia, Laryngitis, Typhus and Typhoid fever—all subjects of great interest.

Hamilton's Table of Chemical Tests.[1]

We commend this table to our readers. It is prepared by a gentleman devoted to his subject, and amply informed on its details.

"In this arrangement, the chemical agents (alphabetically arranged) have their tests on the next column, in alphabetical order and without reference to their delicacy, followed in the next column by the colour of the precipitate and delicacy of test; in the fourth, by the composition and nature of the precipitate; in the fifth, containing the author; and in the last, the remarks necessary in their employment. The whole arranged for the use of the physician, chemist, or apothecary, in a simple form, and embracing every information that the present advanced state of the science furnishes to the chemist."

MISCELLANEOUS NOTICE.

On the frequency of the Pulse in Infants.[2]—In a recent work by M. Jacquemier, it is stated that the minimum of frequency in the pulse of new-born infants is about 97, and the maximum about 156. Haller fixed it at 140, and Soemmering at 130. Every physician is well aware how easily the pulse of infants is rapidly quickened by restlessness, crying, &c., and that the only accurate way to determine it is to feel it during sleep. In the act of sucking, the breathing is hurried, and the circulation is therefore necessarily quickened at the same time. Valleiz, who seems to have used the greatest precautions to avoid all sources of mistake, states, as the results of his examinations, that in infants from two to twenty days old, the minimum of frequency is about 76, and the maximum about 104. We may therefore consider the medium 87 as the average frequency of the pulse at this period of life. It has been generally believed that the frequency of the pulse diminishes as the age of the infant advances. The very reverse, however, seems to be the case, according to the experience of this author; for he found that, at seven months, the pulse is much more frequent than during the first week after birth, and that from that period it progressively diminishes in rapidity to about the sixth year.—*Clinique des Maladies des nouveaux nés, par F. Valleiz*, 1833; *and Edinburgh Monthly Journal of Medical Science.*

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[1] **Table of Chemical Tests. By James Hamilton, M. D., of Baltimore, prepared for the Maryland Medical and Surgical Journal.**

[2] **London Medical Gazette, August, 1841, p. 767.**

THE

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Art. I.—ON OPHTHALMIA.

By Edward Jenner Coxe, M. D., of New Orleans.

Dr. Dunglison,

Dear Sir,—Than ophthalmia, as generally observed, few diseases are more common, or, at times, prove more harassing and vexatious, as well to the patient as the physician.

From the speedy and complete success attending the very simple mode of treatment adopted in two cases, lately presented to my notice, I am induced to send you a report of them, in the belief that this mode of applying many remedies will prove more serviceable in many cases of ophthalmia than that generally adopted. Whether correct or not, I feel disposed to attribute the success of this plan of treatment, almost entirely, to the absolute rest imposed upon the eyes, preventing any motion of the lids, and allowing nature full opportunity to exert her well known and powerful curative influence over disease.

Last winter, a man employed in the gas works of this city received an injury on the side of the face, which resulted in a very severe inflammation of the right eye, extending over the conjunctiva of the ball and lids. Supposing it would prove but temporary, he confined himself to bathing the eye frequently with cold water; so painful, however, did it become by the end of the second day, that he requested me to order something for it, stating at the same time his inability to absent himself from work.

I ordered a dose of salts, and directed him to prepare an infusion of the pith of sassafras, when cold, to be mixed with an equal quantity of rose water, and to be used as follows:

Envelope in linen a piece of stale bread, crust removed, of the size of the palm of the hand, saturate this with the above, apply it over the eye, and keep it on moderately tight with a bandage or handkerchief, which was on no account to be removed before seeing me again. The compress to be kept moist by pouring occasionally upon it from above a few table spoonfuls of the liquid.

The next evening he reported that the eye had been very comfortable, pain much diminished, the bandage had not been removed, and he had been at work all day.

Upon examining the eye, I found the inflammation materially lessened, and directed a continuance of the same local treatment.

In two days from this time the eye was perfectly well.

Case Second. A black man, labouring under a severe attack of ophthalmia in both eyes, had been taking various medicines, and applying different washes for about a week without benefit.

The inflammation had been gradually increasing, attended with considerable pain and discharge, and when I saw him, the conjunctiva of both eyes was in a high state of inflammation.

This case occurring shortly shortly after the above, I determined upon trying the same means, substituting for the infusion of sassafras and rose water, a weak solution of the acetate of zinc in rose water, directing him to keep perfectly quiet, and to apply the compress as above directed.

Considering it unnecessary to detail the daily progress, it is sufficient to state, that in the space of one week a perfect cure was effected.

While upon this subject, I will further trespass upon your time by giving the result of a plan of treatment in an exceedingly violent case of ophthalmia for which all the usual remedies had been ineffectually tried.

At the time I tried the plan about to be mentioned, I was not aware of its ever having been recommended: I have lately, however, seen it spoken of in terms of commendation by M. Velpeau, of Paris.

In the year 1824, I attended a healthy negress, aged about eighteen years, for an inflammation of both eyes, which continued to increase in severity, notwithstanding the most active treatment, consisting of frequent and copious general and local bleeding, emetics, nauseants, purgatives, a variety of local applications, confinement to a dark room, and the most rigid diet.

Finding the ordinary treatment of no avail, and feeling uneasy as to the result, I decided upon applying a blister over both eyes, with a soft compress of old linen over them, and retained by a bandage.

At the expiration of eight hours, I removed the blisters, which had drawn very well, and discharged copiously, but not being able to procure a sight of the eyes, I directed a tepid bread and milk poultice to be applied, and renewed every four hours. The pain had become much less, and at the expiration of two days, when enabled to examine the eyes, I was much gratified to find the inflammation considerably reduced, and by continuing the poultice a few days longer, and then substituting the mildest washes, a perfect cure was accomplished in about ten days.

It may not be amiss to state, that, notwithstanding the apparent severity of the remedy, my patient did not complain of its causing any pain, but, on the contrary, that caused by the disease, which had previously been very great, was soon sensibly diminished by the action of the blisters, and was no longer the subject of complaint.

In reference to the proper period for applying blisters over the eyes, in violent and obstinate cases of ophthalmia, it appears to me, that, after a very decided impression has been made upon the general system, by the usual depletory remedies, and not till then, they may be applied with the most decided advantage.

As regards the modus operandi of blisters in these cases, it is unnecessary to dwell upon it, great discrepancy of opinion existing upon that point; I am, however, disposed to believe, that to the simultaneous discharge and excitant effect produced by them, we may reasonably attribute the positive curative effects displayed in this case.

With respect, I remain

Yours sincerely,

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ART. II.—ON SOME DISEASES IN WHICH ALBUMINOUS URINE OCCURS.

BY THOMAS WILLIAMSON, M. D.[1]

One of the Physicians to the Leith Dispensary, &c. &c.

Since the promulgation of the views entertained by Dr. Bright and others, in reference to the urine containing albumen in certain diseased conditions of the kidney, members of the profession in general have willingly given their assent to this doctrine. But whilst, on the one hand, it cannot be denied that Dr. Bright, by his researches, threw light upon much that was formerly obscure, on the other, it may fairly be questioned whether the medical profession are not disposed to attach too much importance to the simple appearance of an adventitious principle in the renal secretion, as pathognomonic of structural change in the kidney. It is my object, then, in the present communication, to inquire whether there are diseases, apart from change in the renal structure, in connection with which albumen is contained in the urine, and by this means attempt to show that this phenomenon is not of such rare occurrence as is perhaps generally believed.

Although Dr. Bright, doubtless, is entitled to the merit of being the first to proclaim to the medical world, the fact of renal disease, coexisting with an altered constitution of the urine and dropsy, as mere symptoms of the primary renal change of structure, yet the existence of albumen in the urine of certain patients labouring under dropsy was made known in the year 1764, by Cotunnius, who, adverting to this phenomenon, as occurring in a young man affected with anasarca, to whom he gave cream of tartar, and increased by this means the flow of urine, says, "nam daubus libris ejus urinæ ad ignem admotis cum pene dimidium evaporasset, reliquum facessit *albam in massam*, jam coacto ovi albumine persimilem."[2] Again, in the year 1770, we find Dr. Fordyce stating, that, "if the kidneys are relaxed or stimulated, chyle, serum, coagulable lymph, and even the red part of the blood may be thrown out."[3] Dr. Darwin, in 1794, states, "there is a third species of diabetes, in which the urine is mucilaginous, and appears ropy when pouring it from one vessel into another, and will sometimes coagulate over the fire."[4] In 1798, Rollo thus writes, "nitrous acid added to healthy urine produces slight effervescence, and gives it more or less of a reddish colour, but produces no precipitation. In some diseases, however, particularly general dropsy, or anasarca, this reagent, when dropped into the urine, produces a milkiness, and in some instances, a coagulation similar to what would take place if added to the serum of the blood;" and again, "in morbid states of the urine, the coagulable part of the serum is detected both by the nitrous acid and even by heat."[5] In 1811, Blackall,[6] Cruickshanks,[7] and Nysten detected the same phenomenon. The latter says that he examined the urine of a young man labouring under acute peritonitis, under which he died; and among the other substances discovered, he states that it contained "a large amount of albuminous matter, which the urine does not contain in a state of health." Talking of the urine belonging to dropsical patients, he states that he procured some from a young man, eighteen years of age, who had been affected with ascites for several months, to all appearance idiopathic; and among the other substances detected by chemical analysis, he adds, "as regards the great quantity of albumen found in this urine, it will be necessary to analyse, and support them by the examination of dead bodies, in order to determine if the dropsy had any share in its developement, or if it was dependent upon a particular state of the urinary organs." He also, alluding to peritonitic urine, says, that "it contained much albumen, which leads to the supposition that the urine becomes albuminous in peritonitis."[1] In 1812, Dr. Wells[2] likewise directed attention to the appearance of albumen in the urinary secretion.

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[1] Edinburgh Med. and Surg. Journal, Oct. 1, 1841, p. 364.

[2] Cotunnius de Ischiade Nervosa Neapoli, 1764, republished in Thesaur, Sandifort, page 417.

[3] Fordyce's Elements of Practice of Physic, 1770, p. 18.

[4] Darwin's Zoonomia, 1794, vol. i. p. 316.

[5] Rollo on Diabetes, 1798, pp. 443–446.

[6] Blackall on Dropsies, 1811.

[7] Ibidem, (see Appendix.)

Previous to bringing forward cases for the purpose of proving the frequent existence of albumen in the renal secretion, altogether independent of any change of structure occurring in the kidney, it may, perhaps, be well, shortly to advert to the opinions expressed by various authors of eminence as to the extreme rarity of its occurrence. Dr. Osborne states in connection with this subject, "in no instance have I met with coagulable urine without diseased kidneys, or healthy kidneys with coagulable urine." Dr. Christison states, that, although coagulable urine may be found without kidney disease, it is, nevertheless, "very rare." M. Rayer is said to have examined the urine of 400 patients taken indiscriminately, the result of which was, that only three presented albuminous urine without granular kidney. M. Solon examined the urine of 500 or 600 persons either in health or full convalescence, and found only one with albuminous urine. And lastly, Professor Forget, on two different occasions, examined the urine of between forty and fifty patients in his hospital, and "found albuminous urine only in those affected with dropsy, and in whom, when they did not recover, the inspection proved the existence of diseased kidneys."[3]

On the other hand, among those who strongly contend for the frequent appearance of albuminous urine without kidney disease, we may mention the name of Dr. Darwall, who illustrates his position by several cases, one or two of which we now call attention to. Talking of effusions which frequently attend diseased states of the heart, he observes:

CASE I.—In a patient who died in the Birmingham Hospital, during the present year, at a very early stage of the effusion, two months before his death, the urine was barely rendered turbid, but the evening he died it was nearly rendered solid by boiling. On dissection, the heart was found enormously enlarged, and the aorta very much diseased, the kidneys were perfectly sound."

CASE II.—Another case "occurred in a lady who had been suffering from pulmonary symptoms, and symptoms of disease of the heart for nine months. When we first saw her, at this time, the urine coagulated strongly, and continued to do so till the period of her death, three months afterwards; yet, while the left lung, the pleura, and the heart, exhibited serious disease of long standing, and while the liver was also diseased, though in a slighter degree, there was no appreciable change whatever in the substance of the kidneys."[4]

The three following are cases of pneumonia, and occurred in our own experience.

CASE III.—John Guy, aged 25, a stout, sober, and healthy young man, by occupation a seaman, after having been exposed to cold, was seized with rigors, which were shortly afterwards followed with dyspnœa, cough, and copious rusty-coloured expectoration; crepitating rale heard all over the right side; passed about a pint of urine in the twenty-four hours, of a dark straw colour, specific gravity 1012. In this case, nitric acid gave an albuminous precipitate to the extent of nearly one half of the volume of fluid employed, which precipitate withstood the action of heat. This occurred at an early period of reaction. The young man subsequently recovered.

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[1] Nysten, Recherches de Physiologie, 1811, p. 255, 260, and 262.

[2] Transact. of a Society for the Improvement of Med. and Chir. Knowledge, vol. iii. p. 167. London, 1812.

[3] See Christison on the "Granular Kidney," page 39.

[4] Cyclopædia of Practical Medicine, vol. i. Article "Dropsy," p. 637 and 640.

Case IV.—Alexander Ballingar, an old soldier, aged 68, stated that he enjoyed during his life the best of health, with the exception of a severe inflammation of the chest, which was brought on by lying three days and nights on the field of Waterloo, after having been wounded in that engagement. He had been ten days ill with dyspnœa, cough, and coloured expectoration before seen by me, at which time all these symptoms continued. In addition, the right side of chest upon percussion gave a sound as dull as that emitted by marble; percussion on left side tolerably natural; bronchial respiration and bronchophony were heard distinctly all over the right side, while mucous râles, with puerile respiration, were present in the left side of chest; passed about a pint of urine in the twenty-four hours, of the colour of small beer, specific gravity 1022, which yielded no precipitate by heat alone. After the addition, however, of a little nitric acid, a copious albuminous precipitate was the result, which effectually withstood the reapplication of heat, showing that the urine had been previously alkaline. This man died.

Upon dissection, the whole of the right lung was found to be in the state of gray hepatisation, with extensive old cellular adhesions between the *pleura costalis* and *pulmonalis* of both sides; the left lung was in a state of active congestion. The kidneys and other organs were perfectly healthy. This man, it should have been stated, was a drunkard.

Case V.—John Gray, aged 45, by profession formerly a soldier, had fought at Waterloo, and died the same day as the preceding case, labouring under all the symptoms of pleuropneumonia. Upon dissection, recent bands of lymph were found passing between the *pleura costalis* and *pulmonalis* of the right side, with some serous effusion into the corresponding pleural sac. Right lung in a state of red hepatisation, with small portions here and there having passed on to the gray, slight effusion into the pericardial cavity, with soft lymph between its serous coats. Kidneys perfectly healthy to all appearance, though rather pale in colour; both structures, however, quite distinct. Passed before death about eighteen ounces of pale coloured urine daily. Specific gravity 1012; heat and nitric acid gave an abundant precipitate of albumen.

Most of the following cases came under my own direct observation.

Case VI.—Mrs. Ross, aged 63, of sober and temperate habits, before death had for some years been affected with all the symptoms of scirrhus of the pyloric extremity of the stomach, such as, almost constant pain, anorexia, and frequent vomiting of a dark coloured fluid, somewhat similar to coffee grounds. Upon dissecton, the pyloric extremity of the stomach was thickened and hardened, which arose from its cellular tissue having become hypertrophied. Kidneys perfectly healthy, as were all the other abdominal organs. The lungs were loaded with frothy mucus. Left ventricle of heart in a state of hypertrophy without dilatation; its other cavities were perfectly healthy and natural; the two serous surfaces of the pericardium were universally adherent, by means of old cellular bands. During life there was nothing remarkable in respect of the renal secretion, as regarded quantity. Then, it was not examined. After death, however, the quantity of urine obtained from the bladder, though too limited to enable us to ascertain its specific gravity, nevertheless, by the agency both of heat and nitric acid, afforded an albuminous precipitate almost equal in volume to the quantity of fluid employed.[1]

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[1] In many of the succeeding cases, it will be observed, that the urine was submitted to chemical examination after the death of the patients. Now, though I am aware that on this account objections may be urged against the validity of such cases, on the ground of the serum of the blood exuding through the tissues of the bladder after death,

Case VII.—Mrs. W. for three years before her death had laboured under symptoms of diseased stomach. Upon dissection, the pyloric extremity of the stomach was found in a well-marked state of what is usually denominated scirrhus of the stomach. All the other abdominal organs were healthy. Unfortunately, however, the kidneys were not minutely examined, so that we are unable to bring forward any positive evidence as to their natural or healthy state. We have, however, thought this case worth inserting along with the preceding one of scirrhus of the stomach, more especially as the urine which was obtained from the bladder was highly albuminous.

Case VIII.—J. A., 73 years of age, had been the subject of retention of urine for the last ten or twelve days of his life, seemingly dependent upon a paralysed state of the bladder. The urine was secreted in considerable abundance, and was of a dark greenish colour; specific gravity 1022. This urine contained a large quantity of albumen. Upon dissection the left kidney was very small and atrophied, containing a considerable sized calculus within its pelvis. The parenchymatous tissue of this kidney was almost entirely converted into serous cysts. A smaller calculus, of a peculiar flat button shape, was contained in one of those cysts at the upper part of this kidney. The right kidney was in a state of hypertrophy, but otherwise healthy. The urinary bladder was large, and immensely hypertrophied in all its coats; its inner or mucous coat was rough and granular, several small calculi were found in the urethral portion of the prostate gland, which gland itself was much increased in size.

Some writers upon the granular kidney, in establishing the existence of albumen in the renal secretion, as one of the pathognomic symptoms most to be relied on for pointing out the disease, deny, that, whilst the renal tissue remains unaltered, any organic lesion of the liver is capable of producing the phenomenon in question. It will be seen, by referring to a few cases which follow, that albumen was detected in the urine of individuals, in whom the tissue of the liver was, upon dissection, found to deviate from its normal condition, and to have assumed that peculiar appearance known by the term cirrhosis. Little value may, perhaps, however, be attached to such cases, seeing that it has been doubted by able authority whether this seeming change of structure be really an accidental deposit. I have, notwithstanding, thought them worth recording.

Case IX.—A Prussian sailor fell by accident into the hold of his vessel. Immediately afterwards he was brought to the Casualty Hospital (Leith), when it was found that he had sustained a severe fracture of the cranium. He died in a few hours after admission, with symptoms of compression of the brain. Upon dissection, a large coagulum was found between the inner table of the scull and *dura mater*. The corresponding or left cerebral hemisphere was much compressed, and partially lacerated. The liver was large, and contained many large patches affected with cirrhosis. The spleen was soft, and the kidneys perfectly healthy. The urine was pale and colourless; specific gravity, 1016. When exposed to heat or nitric acid an abundant precipitate of albumen was the result. This man was uncommonly powerful, 30 years of age, and in the full enjoyment of health both previous to and at the time of the accident.

Case X.—J. Robertson, aged 30 years, a stout muscular porter, of intemperate habits, was seized with all the ordinary symptoms of *delirium tremens*, from which he died.

Upon dissection, the traces of general cerebral congestion were apparent, without, however, any of the prominent effects of inflammatory action. Considerable serous effusion was found between the arachnoid membrane and *pia mater*, as also at the base of the cranium. The two serous surfaces of

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and consequently mingling with the urine therein contained; nevertheless, as from experiment I know this to be by no means a phenomenon of universal occurrence, I think it but right to record these cases in conjunction with others.

the pericardium were universally adherent, by old cellular tissue. The left ventricle of heart was hypertrophied, without much dilatation. A ring of osseous deposit was found surrounding the mitral valve.

The liver was about its natural size, but much affected with cirrhosis. The kidneys were perfectly healthy. The urine was of a dark straw-colour; specific gravity, 1018. Heat and nitric acid gave an albuminous precipitate, equal in volume to perhaps a fourth of the fluid employed.

Dr. Blackall gives an instance of albuminous urine co-existing with diseased liver, which we shall here abridge.

Case XI.—A. B. aged 45, sallow and bloated skin; pulse 100, hard; dyspnœa; loss of voice, and stricture about the hypochondria; abdomen swelled; frequent dark bilious discharges; œdema of legs; urine of the appearance and colour of rennet whey, copious at night, precipitating at 160; convulsions shortly came on, with fixed but not dilated pupils. Blood drawn was watery, and much cupped. Not more than two hours before her death, the pulse remained still quick and hard.

Dissection.—Lung every where free from adhesion; about four ounces of bloody serum on each side of the chest; a small quantity of pale fluid in the pericardium; very little water in the abdomen. The liver hard, with a thick curled edge, its membrane being rather white, and greatly thickened, and its surface irregular with tubercles. A considerable portion of its substance was divided into hard brown tubercular masses; the other viscera of the abdomen sound. "I speak," says he, "particularly of the kidneys."[1] It is clearly evident from this language, that his attention was in an especial manner directed to the kidneys, so that it is scarcely possible to conceive that, had their tissue been materially affected, the change would have eluded his observation.

Case XII.—James Lamb, aged 48, by occupation a carpenter, was squeezed between two logs of wood in a ship-building yard, and immediately brought to the Leigh Dispensary, where he soon afterwards died. Upon dissection, the four superior ribs of both sides were found fractured. The right lobe of the liver was lacerated and torn. Its substance presented the appearance usually known under the name of cirrhosis. The kidneys were quite healthy. The bladder contained so little urine as to prevent our ascertaining its proper specific gravity; but which, nevertheless, yielded a copious precipitate both by heat and nitric acid. This man had enjoyed good health previously.

Case XIII.—V. Ward, aged 41, died labouring under the symptoms of *phthisis* and *diabetes insipidus.* Upon dissection, the lungs were found tuberculous. The liver had seemingly undergone fatty degeneration. The kidneys, and other organs, were healthy. The urine was of a pale colour; its specific gravity, however, was not ascertained; heat and nitric acid both yielded a copious albuminous precipitate.

Case XIV.—W. Saunders, aged 60, died of chronic ulceration of the epiglottis and larynx. Upon dissection, the liver was found partially affected with cirrhosis. The kidneys, as well as other organs, were, to all appearance, healthy. The bladder contained a small quantity of urine, which did not admit of its specific gravity being taken, but which yielded a copious precipitate by heat, which was not redissolved by the addition of acid.

The following are cases of various descriptions.

Case XV.—William Hollingworth, aged 45, of very temperate habits, had long laboured under symptoms of diseased heart and blood-vessels, from which he at length sunk. Upon dissection, the left ventricle of the heart was greatly dilated, with proportional hypertrophy. The right auricle was greatly dilated, without hypertrophy. The inner membrane of the ascending aorta was covered with osseous laminæ.

The urine was of a dark straw colour; specific gravity, 1022; heat and nitric acid both yielded an albuminous precipitate.

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[1] Blackall on Dropsies, p. 145.

Case XVI.—James Stirling, aged 23, a young man previously in the enjoyment of good health, was seized suddenly at Hull with indisposition, for which blood was taken from the arm. On his return home he was labouring under severe inflammation of the vein which had been opened. Latterly, symptoms of purulent effusion within the pleural cavity took place, under which he sank.

Upon dissection, the veins of the arm were found filled with purulent matter. Several pints of the same fluid were contained in the right pleural cavity. The kidneys and other viscera were healthy. About a pint of urine was passed in the twenty-four hours, of a straw colour; specific gravity, 1012; heat and nitric acid in this instance formed almost a solid coagulum.

Case XVII.—Jane Patterson, aged 3½ years, had been affected with well-marked pertussis for about two months. By imprudent exposure to cold, an attack of *cynanche trachealis* supervened, and terminated fatally.

Upon dissection, the lungs were found to be the seat of interlobular emphysema. The larynx was highly vascular throughout, having its mucous surface covered here and there with soft lymph. Heart, liver, kidneys, and other organs were perfectly healthy in this case. The urine was pale and colourless; its specific gravity was not ascertained; heat and nitric acid, however, gave a large precipitate of albumen.

Case XVIII.—J. M., aged 5 years, had a mild attack of scarlatina, from which he was convalescing favourably. About three weeks after the appearance of the eruption, his parents observed him slightly swelled in the lower extremities. At this period he was suddenly seized with dyspnœa, and severe lumbar pain, stretching itself down the thighs; the breathing was hurried and laborious, with loud mucous rattle over the whole chest; the urinary secretion was almost suppressed, and the small quantity passed was of a high colour, and deposited an abundant precipitate of a brick colour; pulse 170, strong and full. He was immediately bled, and leeches were applied to the loins. The urine was examined, and its specific gravity found to be 1015, at the same time that it contained an abundant proportion of albumen.

Upon dissection, both lungs were found in a state of active congestion; all the other viscera were healthy, with the exception of the kidneys, which were congested.[1]

As our limits will not permit a full detail of each individual case in which albuminous urine was detected, we must close this part of our subject by little more than a simple mention of those cases of disease in which this phenomenon was found.

1st. It was observed in the case of a young girl affected with pertussis. This girl is now in the enjoyment of excellent health.

2dly. It was observed in a case of *diabetes insipidus*, since dead, without a *post mortem* examination being obtained.

3dly. It was observed in a case of icterus, occurring in a previous healthy man, whose urine was of the low specific gravity of 1008. This man is since quite well.

4thly. It was observed in a case of chronic bronchitis, with diseased heart, where there was no reason to apprehend kidney disease.

5thly. It was observed in the case of a man for many years affected with syphilis, having lost his nose and soft palate by ulceration. This man had taken large quantities of mercury.

6thly. It was observed in a man labouring under severe gastric fever, owing to over indulgence in eating and drinking.

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[1] The appearance which the kidneys presented in this case was simply, as might have been *a priori* expected from the symptoms, that of active congestion, without the slightest vestige of any of the prominent appearances which, according to Dr. Bright, characterise the first stage of the affection described by him.

7thly. It was observed in a young girl affected with severe rheumatic fever; and

8thly. It was observed in a case of modified variola, occurring in a girl four years of age, and the period when it was noticed was during the second day of the eruption.

We thus see that the simple appearance of albumen in the urine is not confined to those cases in which the structure of the kidneys has undergone an evident change; but that the same phenomenon is often visible in cases where the most careful examination fails to detect a deviation from the appearance which these organs ought to present in perfect health.

In attempting to account for the renal secretion sometimes containing albumen apart from kidney disease, we shall take advantage, in our subsequent remarks, of some of the cases wnich we have previously detailed, in order to illustrate our explanations; for instance,

Case XVIII. presents us with an example of scarlatina, in which the presence of albuminous urine was discovered. In that peculiar form of anasarca which follows the scarlatinous eruption, more especially after imprudent and too early exposure to cold, it has been found that the urine possesses characters strikingly analogous to those of the granular kidney, in so far as one of the pathognomonic symptoms of the latter disease is concerned, viz. coagulability by the application of heat, or upon the addition of nitric acid. This well known phenomenon has often been alluded to, and brought forward by those who are disinclined to attach that degree of importance to the simple state of coagulability which the urine may possess as characteristic of renal lesion, and which the partisans of Dr. Bright's doctrine value so highly. But, however little this example may be regarded as affecting the views of Dr. Bright and his followers, it cannot be denied that the almost constant and general appearance of albumen in the urinary secretion of scarlatinous dropsy, goes not a little to stagger the faith of those, who would believe in its existence only in connection with organic lesion of the kidney; for, in order to reconcile this seeming incongruity, they have recourse to the expedient of almost identifying the two diseases. Harmony is thus established by their referring the scarlatinous and renal dropsy to one and the same cause, and the example of those opposed to this theory thus seemingly overturned; because brought forward for the purpose of showing that there were other diseases besides that of the granular kidney, in which not only did dropsy follow as a secondary or symptomatic affection, but that the urine might also be found to contain a large quantity of albumen, altogether independent of, and unconnected with renal lesion.

The attention of the medical profession was, we believe, first directed by Mr. Hamilton to the fact, that in the scarlatinous dropsy, subsequent to the eruption, the kidneys, when cut into, present pretty much the same appearance as they do in the genuine form of Bright's disease in the first stage.

When we reflect upon the various forms which disease may assume; or when we compare the relative appearance presented by active and passive congestion, where none of the other more characteristic products of the former are present in addition to redness, we may well pause before we give absolute credence to such a sweeping proposition, as would declare that the kidneys, (admitting that they may externally present somewhat the same appearance in the two affections now under consideration,) are nevertheless perfectly identical in point of lesion. If such were the case, how comes it to pass that the mortality in the one disease so far exceeds that observed in the other? Ought not this very fact of itself to lead us to the suspicion that, in that peculiar form of disease of the kidney which Dr. Bright has described, and with which his name is associated, there is a lesion of the organ widely differing from that which exists in the kidney after scarlatina? The vascular tissue which enters into the composition of this organ is liable to various gradations of tint, depending proportionally upon the quantity of blood which it may happen to contain at the time of examination. In most acute febrile or exanthematous affections, therefore, in which the natural and healthy function of the kidneys is either suspended or interfered with, it surely is not irrational to suppose, that active or passive congestion may, to a certain extent, be present in the renal substance; which peculiar condition of the vascular tissue we apprehend to be the real cause of the apparent similarity which exists between the real granular kidney and the same organ after scarlatina. The adherents of the doctrine which contends for the similarity of structural lesion, which the kidney is the seat of in the two diseases, for the purpose of throwing aside the simple state of passive congestion, and discarding this condition of the kidney as explanatory of the appearances which they assume it to present, may, with seeming plausibility in substantiation of their own proposition, bring forward cases of dropsy after scarlatina, in which the kidney presented unequivocal and irrefragable evidence of having undergone that pathological change described by Dr. Bright and other authors. All this, we most willingly admit, may take place; but, on the other hand, we are disposed to regard these isolated cases as exceptions to a general rule, and as simple examples of the coincidence of scarlatina, and it may be subsequent dropsy, in a system where the kidneys were previously the seat of organic disease. More matter might easily be brought forward, even from Mr. Hamilton's paper, for the purpose of showing that an essential difference exists between renal and scarlatinous dropsy; but this our present limited space will not permit.

We have alluded to congestion of the kidney, as likely to lead to the confounding of appearances presented by that organ in the granular kidney and scarlatinous dropsy; but we come now to consider hypothetically, as to the likelihood which exists of congestion also exciting an albuminous state of the urine. Although the general question has not yet been decided as to whether dropsy is to be ascribed to diminished absorption, or undue exhalation, it is, nevertheless, generally admitted in some cases to depend upon a want of balance between these two functions. Dr. Marcet gives a particular account of the chemical nature of the dropsical effusions found in various diseases, and in different cavities of the body, as in hydrocephalus, ascites, hydrothorax, &c., from which it would appear that the prevailing animal substance is albumen. As plethora has been shown by Magendie to be unfavourable to absorption, may we not justly consider this state of the system as one of the predisposing causes of dropsy? Now, if the due equilibrium which ought to subsist between absorption and exhalation be thus interfered with by means of plethora, we may easily perceive how an organ, or structure within any of the cavities of the human body, becoming the seat either of active or passive congestion, should stand as cause to the effect of serous effusion, which subsequently succeeds in the cavity in which they may happen to be contained. If such is the case with regard to the pleural or abdominal cavities, by extending the operation of the same law to the kidney, we may perhaps explain the existence of albumen in the urinal secretion.

The pelvis of the kidney may justly be regarded in the light of a membranous cavity, so that any circumstance tending to excite fulness or plethora of its vessels, will have the direct effect of disturbing the balance between the functions of exhalation and absorption; the exhalation being increased, whilst *pari passu*, the absorption is diminished, may therefore satisfactorily enough account for a more than usual quantity of serum mingling with the proper renal secretion, and consequently giving rise to the existence of albumen. Such, we apprehend, takes place in those cases of diseased heart, more especially where hypertrophy of the left ventricle exists; in which albuminous urine is not unfrequently found, as in cases tenth and fifteenth; for it must be obvious to every one, that in such cases, the kidneys, as well as the other viscera below the diaphragm, are liable to become the seats of congestion, either owing to increased arterial action, or the imposition of some barrier to the free return of the blood by means of the veins.

Were we to enter into the field of speculative inquiry, as to other probable causes of albuminous urine, we might readily mention a few.

We have said that it may be caused by a species of dropsy of the pelvis of the kidney itself, owing to plethora disturbing the proper balance between the function of exhalation and that of absorption; the blood at the time being in a state of perfect health. But may we not refer this phenomenon to an essentially morbid condition of the circulating fluid itself? The ancients were well aware of the important part which the fluids sustain in the animal economy; and were inclined to ascribe much, if not most diseased action, to some vital change in the nature and quality of the fluids themselves. Thence arose their system of humoral pathology. Perhaps none of the fluids were regarded by them so much in default as the blood; but, like all other too exclusive doctrines, the pathology of the humoralist gradually gave way to that of the solidist, who, arguing from the changes perceptible in structure, rested too much on simple organic lesion, to the almost total rejection of the changes which might previously have been effected, in respect of the quality and composition of the fluids by means of which these solids were maintained. That the blood as a fluid is subject to disease, is, we believe, pretty generally admitted in the present day; and if we reflect that the blood is next in importance to what we term *life itself*, since by its undisturbed and healthy circulation, that most mysterious principle is upheld, it is not difficult to perceive how vast must be the baneful influence exerted on the living economy, by a deviation of this vital fluid from the true standard and composition of health. Accordingly, we find, as the result of rigorous observation, that, in certain diseases, the blood undergoes important modifications.

Without entering into a minute chemical detail of this fluid, which would be foreign to our present undertaking, it may be sufficient to remark in a general way, a few of those diseases which most convincingly demonstrate to us the truth of these observations. First, then, we find that the absolute quantity of blood may be increased, as in plethora, or be diminished, as in that state of the system called anæmia; 2dly, in respect of its quality, important deviations from health are sometimes distinctly cognisable. The various constituents of which it is composed may individually be either in a state of excess or deficiency; thus the solid material, or *crassamentum*, may be at one time too abundant; at another, the serum may preponderate or diminish in quantity or quality, whilst again the hematosine may vary as to its proportion. The fibrine, albumen, and salts entering into the composition of the serum, are also liable to important deviations. In the disease or peculiar condition of the system styled chlorosis, we have a familiar illustration of the deficiency of colouring matter. The blood is also liable to deficient coagulation. Huxham says, in talking of the blood in malignant fever, "the crasis of the blood is not sufficiently firm, too attenuated; the serum blackish, and tinctured with red." The opinion of early writers, with regard to the imperfect coagulation of blood in certain fevers, has been subsequently fully substantiated and confirmed by the experience of more modern observers. In yellow fever, for example, Dr. Stevens states, that the blood is in a much more fluid state after death, than is usually the case in other diseases. His words are, "the colour of the whole mass of blood, both in the arteries and veins, was changed from its natural scarlet or modena red, to a dark colour. I have frequently filled one glass with the black fluid taken from the heart, and another with the black vomit taken from the stomach. They were both so unlike the blood of health, and resembled each other so completely, that it was almost impossible to distinguish the one from the other; and from its appearance, it was very evident that such diseased blood could no more stimulate the heart, or support life in the solids, than putrid water can nourish vegetables, or carbonic acid gas support respiration."[1] In

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[1] Stevens on the Blood.

Asiatic cholera, again, we have an instance where the blood has been found in the very opposite state to this, as regards consistence—being thick, and of a very dark colour; but perhaps one of the very best instances for the purpose of exemplifying the wonderful change which the blood sometimes undergoes is to be found in the disease termed scorbutus. Dr. Mead, in describing the blood in this disease, says, "as it flowed out of the orifice of the wound, it might be seen to run in different shades of light and dark streaks. When the malady was increased it ran thin, and seemingly very black, and after standing some time in the porringer, it turned thick, of a dark muddy colour; the surface in many places of a greenish hue, without any regular separation of its parts. In the third degree of the disease it came out as black as ink, and, though kept stirring in the vessel many hours, its fibrous parts had only the appearance of wool or hair floating in a muddy substance."[1] In this affection, then, we see the wonderful influence which certain kinds of diet exert upon the quality of the blood. In the disease termed *purpura hæmorrhagica*, or *hæmorrhæa petechialis*, we have one of the most palpable instances of abnormal fluidity of the blood, as is evident from the circumstance of its issuing from its proper vessels, independent of any abrasion. The mucous membrane seems to be the tissue from which it is most prone to flow. Looking at all those circumstances, therefore, it will surely be admitted that albuminous urine may result from a morbid or abnormal fluidity of the blood.

Other agencies still, we conceive, may be capable of producing an albuminous state of the urine. Dr. Darwall says, "as a secreting organ, the kidney is especially liable to be affected by the pabulum afforded it; and should the blood reach it in an imperfect state, whether in consequence of indigestion, &c. we may expect that its function will be impaired." It is a well-known fact that the urine is often highly albuminous after having partaken of pastry and other indigestible substances. Our case sixth, not fully detailed, presents us with an example of albuminous urine following indigestion. May not nervous influence modify the renal secretion? Take for example the affection commonly termed hysteria as a familiar and daily instance of illustration. We all know that, in this affection, a pale and copious secretion of urine is one of its prominent symptoms, and it is to be borne in mind that this peculiar condition of the urine requires but little time for its developement. If, then, nervous agency has such a powerful influence in inducing the simple change of colour in the renal secretion, apart altogether from any thing like structural lesion, it surely is not difficult to suppose that a change or modification in its constituent elements, may be effected through the same medium.

We come now to offer a few remarks upon the true value of albuminous urine, as pathognomonic of organic disease of the kidney. We have seen that the granular kidney is not the only disease in which albumen makes its appearance in the urine. We have also enumerated several instances in which this phenomenon was present, without the most careful examination after death revealing to us any change of structure in the substance of the kidney. It must, however, have struck those who paid attention to the specific gravity of the urine, in those cases which we detailed, and where particular care was taken to ascertain this point, that in very few cases, indeed, had we any thing like the unusual low specific gravity so characteristic of the granular kidney. To this physical symptom, then, we would be inclined to attach more importanee as a single symptom, than the mere presence of albumen in the urine. Dr. Prout says, "I am induced to conclude, that an albuminous condition of the urine taken alone, as a symptom, does not, in the present state of our knowledge, indicate the use of any particular remedy, or mode of treatment, but that, nevertheless, it is a symptom of which we ought to be always aware, since, taken in conjunction with the others, it may be occasionally useful in directing us to form a more correct judgment of the general nature of the disease."

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[1] Mead's Medical Works.

BIBLIOGRAPHICAL NOTICES.

Stewart on the Diseases of Children.[1]

The work of Dr. Stewart—owing to accident—has not reached us until recently, although it has been before the profession for several months. Dr. Stewart is the translator of M. Billard's work on the same subject, which we characterised on its appearance as having a better pathological foundation than any of the numerous works on the diseases of children that had preceded it.

The work before us is deserving of similar encomiums, and the valuable treatise of Billard well prepared the way for it. The object of the author, as stated by himself, was the condensation of existing knowledge from facts, both from his own sources and from the recorded experience of others, and thus to present, without the detail of cases, a treatise on the affections of children, in which the subject may be considered with a direct practical bearing; and in this he has succeeded in a great degree. One or two errors we have noticed in a hasty glance at the work, which he may correct in a future edition. For example, he states at page 247, that "the oil extracted from the seeds of the Artemisia *santonica* is an anthelmintic in common use, and is certainly very efficacious." No such oil has fallen under our notice, either in this country or elsewhere, the oil used here is that of the chenopodium anthelminticum.

Morton's Edition of Ellis's Formulary.[2]

This work has been long before the profession, and its sale exhibits how greatly such works are sought after.

A weighty difficulty with the young practitioner is to know how to prescribe the different articles of the Materia Medica, with whose main properties he may, nevertheless, be conversant. This difficulty is in some measure obviated by works like the one before us. From time to time, too, they require being brought up to the existing period; and in the present case, the respectable publishers have done well to enlist the services of so competent an individual as Professor Morton.

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[1] A Practical Treatise on the Diseases of Children. By James Stewart, M. D. 8vo. pp. 547. New York, 1841.

[2] The Medical Formulary; being a collection of prescriptions, derived from the writings and practice of many eminent physicians in America and Europe. To which is added an appendix, containing the usual dietetic preparations and antidotes for poisons; the whole accompanied with a few brief pharmaceutic and medical observations. By Benjamin Ellis, M. D. &c. &c. Sixth edition, revised and extended by Samuel George Morton, M. D. 8vo. pp. 262. Philadelphia, 1842.

Western and Southern Medical Recorder.[1]

This is the title of a new candidate for professional favour on the western side of the Alleghanies. The school of Louisville has already a journal in connection with it; and the one before us is destined, we presume, to be, in some respects, the organ of the medical school of Transylvania University. Professor Cross is well calculated to be its editor. He is well read in professional lore; and is full of zeal and activity in the cause of science.

We cordially wish his periodical every success. It is a new labourer in the field of science, and cannot fail to bring forth useful fruits.

Philadelphia Medical Examiner.

This periodical is about to undergo changes. It receives as its acting editor Dr. Reynell Coates of this city. No one could come to the task better prepared by education; by the possession of a vigorous intellect, and of powers of description and of criticism, with which few are gifted. As a surgical writer, he is well known by several excellent articles in the American Cyclopedia of Medicine and Surgery, and numbers in many of our great cities have admired the mind and the language displayed in his lectures on *Popular Physiology*,—a subject so important to all, but which is unfortunately too much neglected.

The Examiner will still continue to receive the able assistance which its former editors are capable of rendering it.

MISCELLANEOUS NOTICE.

Philadelphia Medical Schools.—Notwithstanding the multiplication of medical schools elsewhere, Philadelphia retains the decided pre-eminence, which she has always enjoyed as a seat of medical learning. The great advantages afforded by her institutions, which have been engaged for some time in the business of medical instruction; the enviable reputation of the teachers; the *materiel* of all kinds with which they are so abundantly supplied; the well cultivated field, which she possesses for clinical instruction; richly endowed hospitals; well conducted dispensaries, into which diseases of every kind are received; to say nothing of the advantages afforded to the student by the quiet character of the city, and the reasonable rate at which he can supply himself with every thing of necessity and luxury,—are every where appreciated. Quiet and unobtrusive as her different schools now are, they have attracted to the city the usual number of students. The Faculty of Jefferson Medical College can congratulate themselves on a considerable accession to their numbers of last year; and if such be the fact now, how flattering must be the prospects hereafter. The professors under the new organisation have given unmixed satisfaction, and are proceeding zealously and efficiently in the discharge of their responsible duties. The museum has obtained large additions, and is daily receiving more, and every thing proceeds harmoniously and effectively.

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[1] The Western and Southern Medical Recorder, edited by James Conquest Cross, M. D., Professor of the Institutes of Medicine and Medical Jurisprudence in Transylvania University, &c. No. 1. Vol. I. for Nov. 1841. 8vo. pp. 48.

Two sets of clinical lectures are delivered in the week at the Philadelphia Hospital:—one on Wednesday, by professors of the University of Pennsylvania; and one on Saturday, by professors of the Jefferson Medical College. The hospital fee admits the students to both courses.

Of the numbers at the University of Pennsylvania and the Pennsylvania College, we know nothing certain. We may state, however, on the authority of an excellent friend, who is attached to the former institution, that the attendance there is as usual; and on the whole the number in the city is about the same as last year.

It need scarcely be said, that if the multiplication of colleges, in any one place, be an evil, there are advantages in its train. It makes manifest the facilities which the place affords; and in the case of Philadelphia is calculated to confirm the reputation, which she has always enjoyed, of being the great centre of medical education in the United States. At no former time, has she so richly merited the reputation as at present, and it will be her own fault, should she exhibit fewer claims to the consideration of the medical student.

Berkshire Medical Institution.—The published catalogue of this institution, contains the names of 103 students. The number of graduates of 1840 was twenty-two.

Vermont Academy of Medicine.—The annual announcement contains the names of twelve graduates. The honorary degree of Doctor of Medicine was conferred on three others. The faculty is composed of the following gentlemen: Jas. M'Clintock, M. D. President, and Professor of Anatomy and Medical Jurisprudence; Joseph Perkins, M. D. Registrar and Professor of Materia Medica and Therapeutics; Frank H. Hamilton, M. D. Professor of the Principles and Practice of Surgery; David M. Reese, M. D. Professor of the Theory and Practice of Medicine; Chauncey Z. Mitchell, M. D. Professor of Physiology, General Pathology, and Operative Obstetrics; William Mather, M. D. Professor of Chemistry and Pharmacy; William C. Wallace, M. D. Professor of Ophthalmic Anatomy and Surgery; Egbert Jamieson, M. D. Demonstrator of Anatomy.

Anatomie Clastique du Doct. Auzoux.—In our August number of the present series of this work, we mentioned the artificial anatomical preparations of Dr. Auzouz, of Paris, and that he had appointed H. Rawls & Co. of Albany, his agents for their sale and distribution in the northern states. Since then, we have been requested to notice, that Dr. J. Millington, teacher of anatomy in William and Mary College, Williamsburg, Virginia, has been appointed agent for a like purpose, in the southern states.

As these preparations are at present little known in this country, we think it right to apprise our readers that they are as perfect models, or representations of the various parts of the human body, when divested of its integuments, as can well be prepared by art. The preparations are made of *Papier maché*, a substance of great hardness and durability, and not very easily broken. Each muscle, or viscus, is cast in a mould, and afterwards coloured from nature. They are so constructed, that every portion of one side of the body may be taken to pieces, and put together again, with great facility; thus exhibiting the internal and external form of each muscle, in its proper form and proportions; or the entire subject, when put together. Each muscle carries with it the arteries and veins that belong to it, shown in an injected state; as well as all the principal nerves, which may be traced to the brain, and medulla spinalis.

Dr. Auzoux has been many years in bringing these models to their present state of perfection, and has been aided in his labours by several of the most experienced anatomists in Paris, so that full confidence may be placed in the correctness of the objects represented.

To the medical student, before attempting dissection of the dead subject; and the medical practitioner who wishes to renew or keep up his anatomical knowledge, these models will prove of great utility and importance, especially in the southern states, and all hot climates, where animal decomposition proceeds so rapidly after death, as to preclude the possibility of studying anatomy upon the real subject. We are glad therefore to find that a trustworthy agent has been appointed in the south for the distribution of these excellent models, and we add a list of the preparations Dr. Auzoux is now prepared to furnish, and the prices he charges for them in Paris. They are

		Francs.
1.	A complete model of a man five feet six inches high, showing all the bones, muscles, arteries, veins, lymphatics, glands, facia, &c. on an iron stand,	6000
2.	The above of smaller dimensions, and less developed in its parts,	3000
3.	The large model, without the lymphatics and other small vessels and parts; less developed than in the first model,	3200
4.	Model of a man four feet high, on iron stand, showing all the muscles, and all the large vessels and nerves, to an extent sufficient for most purposes of study and instruction,	1050
5.	Model of a woman, with the pelvis, and organs connected with the uterus in an unimpregnated state, fully developed, and movable,	1000
6.	A set of fourteen models, (size of life) of the gravid uterus, showing the progress of gestation from conception to parturition; and examples of enlarged ovary, and of extra uterine conception,	500
7.	Model of the female pelvis, and parts adjacent, with external and internal organs of generation,	300
8.	Seven models, or half the above set of uterine models, showing the progress of gestation at seven distinct periods,	300
9.	Model of the internal and external ear, of large dimensions, and separable to show each part distinctly,	150
10.	Dissecting model of the brain and medulla spinalis, with the origin of all the nerves, and their primitive ganglia,	150
11.	The leg and foot of the large model, No. 3, detached,	150

12.	Model of the eye, with its muscles and internal parts, on a large scale, ...	100
13.	Model of the fœtal heart with its vessels, large scale, .	50
14.	The leg and foot of the small model, No. 4, detached, .	50

Models of other parts of the body in detached forms, are in preparation, and will shortly be ready for delivery.

To such of our American readers as are not conversant with the currency of France, we will observe that the *franc* is equivalent to about twenty cents of United States money; but adding the expense of package and freight from Paris to our ports, makes each franc equivalent to about a quarter of a dollar when the models are landed here; and they are not subject to any American tariff duty. From the great demand for these models at the present time, (as they are introduced into most of the medical schools of Europe,) Dr. Auzoux will not permit any of them to leave his establishment in Paris, until they are paid for there.

Dr. Millington requests us to state that he is now prepared to receive and execute orders for any, or all of the above models, at Dr. Auzoux's prices in Paris, with the addition only of the exchange value of money between this country and Paris, the freight and shipping charges, and any other actual costs of importation, (and insurance, *if desired*,) and five per cent commission on the value, for his trouble. And he will reply to any post-paid letters asking further explanations and particulars. But, on account of the conditions prescribed by Dr. Auzoux, he cannot transmit any orders to Paris without first receiving the value in cash, or approved notes or acceptances.

The models are in daily use by his pupils, and may be seen at his office in Williamsburg, Virginia, by such as wish to inspect before they purchase; and all orders shall be completed within eighty to a hundred days after they are paid for.

Report of the Obstetric Practice in the Philadelphia Dispensary, for the Fourth, Fifth and Sixth months, 1841. Joseph Warrington, M. D., Accoucheur.—Twenty-five women have been delivered, at or near full term, of twenty-five children, of whom eighteen were boys, and seven girls.

The average duration of labour in twenty cases was thirteen and a half hours, the extremes being two and ninety-six hours.

The average time required for the spontaneous delivery of the placenta was, in nineteen cases, twenty minutes—the extremes being five and sixty minutes.

The fœtus presented the cephalic extremity in all cases. In nineteen cases in which the position of the fœtus was carefully noted, fifteen were in the first, two in the second, one in the third, and one in the fifth of the vertex.

In one case the occiput presented originally transversely to the left ilium, in consequence of contraction of the sacro-pubal diameter of the superior strait. In this case the shoulders were delivered transversely at the inferior strait. The subject of this case was delivered by forceps, which could be made to lock only with the pivot directed toward the symphysis pubis. One blade, therefore, embraced the posterior portion of the left parietal bone, and the other passed over the right portion of the coronal suture and down upon the face, the head having rotated to correspond with the first position of the vertex—the impracticability of adjusting the forceps to that ascertained direction of the head, is ascribed to the arrangement of the superior strait. The child did well; the mother had a slight attack of metro-peritonitis, but this was promptly subdued by free bleeding from the arm, and the application of leeches to the left iliac region.

Two of the children were still born; one apparently in a state of asphyxia, the labour having been so rapid as to terminate before any assistance could be rendered; and the other in a semi-putrid state, the fœtus having evidently been dead some time before parturition.

One child was born in an extremely feeble state, after having been subjected to severe uterine contractions, several days successively, before the labour was terminated; it died in a state of exhaustion, four days after birth.

One child had erysipelas, commencing in the scalp, and spreading over the upper part of the body. It recovered under the persevering use of small doses of calomel, bicarbonate of soda, and powdered acacia internally, and the constant application of the mucilage of the slippery elm externally.

In one case the placenta was found to be adherent to the fundus of the uterus, requiring the careful use of the hand to separate it. Patient recovered without subsequent accident.

There were two cases in which the placenta was retained—one during five hours, and the other one hour and a half.

The placenta in both these cases, presented its whole internal disk to the os uteri, which was too small to transmit it. In one of these cases, also, the tonic contraction of the uterus was so feeble that ʒss. of ergot was given before it appeared expedient to use manual aid. In the other, also, the patient was suffering much from hemorrhage; free frictions upon the abdomen, and the introduction of the hand into the uterus, were immediately sufficient. Both these cases subsequently did well.

In the subject of the delivery of the semi-putrid fœtus, though only nineteen years old, there was a large varicose tumour on the left labium. It rapidly subsided after delivery, with no other treatment than the free use of cold salt water.

Two of the cases which have been under care, required much attention for a long time before and after delivery. One had been the subject of inguinal abscess, supposed to have descended from the fascia of the psoas muscle, in whom the pressure of the gravid uterus was attended with great distress; although her labour was well conducted, she had an attack of peritonitis, which required great vigilance. She slowly recovered, without the recurrence of the abscess.

The other case was the subject of a scrofulous diathesis. She suffered during the latter months of pregnancy with severe pains over the whole abdomen, and especially in the right inguinal region. The labour was accomplished as in the other case, without extraordinary difficulty—but the patient passed through the various grades of peritonitis, metritis, and periostitis, and, finally, inguinal abscess. She at present offers some hope of recovery.

For most important aid, in the management of these protracted and critical cases, it is my duty to acknowledge the unremitting zeal of the members of my class, who participated in the treatment, and my thanks are due to the surgeons who gave us their council in the two cases last mentioned. Most of the physical comforts enjoyed by these poor women were furnished by the "Philadelphia Nurse Charity." There were several other cases of milder forms of peritonitis. They all recovered well under the usual treatment.

Quarterly Report of the Obstetric Practice in the Philadelphia Dispensary, for the Seventh, Eighth, and Ninth months, 1841. Joseph Warrington, M. D., Accoucheur.—Fifteen women have been delivered of fifteen children, of whom nine were boys and six were girls.

The average duration of labour in eleven cases, was six hours; the extremes being two and twelve hours.

The average amount of time required for the spontaneous delivery of the placenta, in six cases, was nineteen minutes; the extremes being five and thirty minutes.

In four cases the placenta was retained, from incapacity of spontaneous expulsion. In two of these, however, it was merely necessary to introduce the index-finger within the os uteri, to bring down an edge of the placenta. In another the entire hand had to be passed up for that purpose, while in the fourth case, in consequence of an atonic state of the uterus, contractions were produced by the introduction of the hand, after an apparent failure to produce this effect by the administration of two scruples of powdered ergot, in two drams of the vinous tincture of the article.

There were two cases of uterine hemorrhage after delivery. In one woman, (who at a previous pregnancy had placentæ præviæ, with profuse sanguine discharge during labour,) it was promptly arrested by the use of wine of ergot, and abdominal compression. In the other case, the patient was in advanced phthisis; it came on some time after she had been placed in bed. It was arrested only by the free use of wine of ergot, with additional quantities of wine, (to sustain her in her prostrate condition,) and also by the use of firm compression of the abdomen and vulva.

The women all recovered.

The fœtuses were found presenting the cephalic extremity in ten of the cases which were noted—nine of these presented in the first position.

There was also one presentation of the breech, and one of the feet.

One child was still-born, (the subject of the breech presentation)—another died near a month after delivery, apparently of meningitis.

The other children were doing well at the time of our attendance.

Cause of Ciliary Motion. By Edward Forbes, M. W. S., For. Sec. B. S. &c.—When, through the elementary animal tissue, (the passive gelatinous tissue, seen in the sponges), granules are interspersed, it becomes active, and presents motions of undulation, contraction, and extension. This granular tissue, in its simplest form, is seen in the hydra, or fresh-water polype, and in the bodies of the sertularian hydroid polypes. In the arachnodermata (or medusæ) we find the inactive gelatinous tissue becoming cellular, and constituting the greater part of the animal's body, but the motions of that body are effected by rings, bands, and processes, composed of the active granular tissue. In the order ciliograda of that class we see the largest known examples of those remarkable organs the vibratile cilia. These cilia are lanceolate, bent, flattened processes, not tubular, as some have stated, but solid. Neither are they webbed together, as they have been figured, but separate. They are placed in transverse rows on short bars of the granular tissue, which, by the way, is always translucent, while the gelatinous tissue of a tegumentary state, of which the cilia themselves are composed, is always transparent. That the vibratile motion does not originate in the cilia themselves, is proved by the fact, that if one be cut away from its translucent base, it always remains immoveable; and that the motion properly resides in the base composed of granular tissue, is evident, since, if the smallest portion of that tissue remain attached to one of the cilia, when it is cut away, it continues to vibrate. Now, if we suppose a ciliferous bar to present regular undulatory motions in one direction, such a motion as is seen in the bodies of some of the lowest trematode entozoa, the Tetrastoma Playfairii, for example, we have at once the explanation of the phenomena of ciliary motion in the ciliograda. Such an explanation will also account for the ciliary phenomena presented by the wheelbearing animalcules and other infusoria, where the undulations need only to be propagated in a circle to produce the revolving appearance. It may be questioned, whether there may not be a difference in the cause of motion between the voluntary cilia of these animals, and the involuntary cilia seen on certain membranes in others. But when we consider that the involuntary movements of the cilia round the margins of the remarkable cup-like processes which stud the branchiæ of the Echiurus, (discovered last winter by Mr. Goodsir and myself,) appear to originate in the same organisation, we may speculate on the probability of the same causes operating in both cases. A minute inquiry into the nature of the involuntary vibratile cilia seen on mucous surfaces among the higher animals is most desirable.—*Edinburgh Monthly Journal of Medical Science.*

On the Employment of Nitrate of Silver in White Swellings. By M. Jobert, Surgeon to the Hospital St. Louis.—By a series of accurate and conclusive observations M. Jobert has shown that the best and most prompt means of overcoming articular pains in cases of white swelling, and to make the turgescence of the tissues disappear, consists in the external employment of an ointment of nitrate of silver. We have watched on fifteen patients the action of this remedy, in the wards of M. Jobert, and have been astonished at the prompt effects in long-continued and previously rebellious diseases. The treatment consisted in frictions on the diseased articulation with an ointment composed of thirty parts of lard to four of nitrate of silver. If the action of this be insufficient M. Jobert uses eight or twelve parts of the salt to thirty parts of lard. These ointments, designated by the numbers 1, 2, 3, constitute the whole of the treatment. Twelve or fifteen hours after the first employment of the ointment, and generally after the second friction, an eruption of small acuminated pustules appears, presenting a black point in their centre, and surrounded at their circumference by a small rosy areola. The liquid contained in the vesicle at first resembling thick milk, and rapidly assuming a yellowish-white appearance, afterwards becoming true pus. Each friction is accompanied by pains which last three or four hours. About the second or third day the skin becomes of a violet colour, and smarts acutely. The frictions must then be suspended, and not renewed until the parts are calmed. We do not enter into further details, as a full memoir on the subject is promised.

[It is very extraordinary that such accurate pathologists as the French should so generally continue to class as "*tumeurs blanches*" the very different diseases to which the joints are subject. We are thus left in doubt whether the above cases were scrofulous enlargement of the articular extremities of the bones, ulceration of cartilage, disease of synovial membrane, or of parts external to the joint.]—*Bulletin Général de Thérapeutique. Juin,* 1841.

Report on M. Louvrier's Treatment of Anchylosis by sudden and forcible Extension. By MM. Thillage and Berard.—The following is the substance of the above lengthy report. M. Louvrier's machine has been employed on twenty-two patients, of whom only three have experienced ill effects, all the others having escaped injury. Most of the patients suffered excessive pain at the moment of operation. In no case has the anchylosed articulation recovered entire freedom of motion. Those patients most successfully treated are obliged to use a staff in walking; one only walks without a stick, but the restraint is evident.

With regard to the unfortunate cases: in one female, in whom the anchylosis of the knee was complete and the limb fully flexed, the application of the machine was followed by a very considerable rupture of the skin, luxation of the leg upon the posterior part of the thigh, and abundant suppuration which terminated in death three weeks after the operation. At the necropsy the articular cavity was found full of pus, the popliteal artery intact, the popliteal vein full of pus and its coats thickened. Many muscles were ruptured and softened; the anterior crucial ligaments softened; one of the posterior softened, the other ruptured, attached by one extremity to the tibia and terminating at its free extremity by an osseous portion, which was evidently part of the condyle of the femur, fractured at the moment of operation.

Another patient suffered excessively acute pains at the moment of operation, and remained during some time in a sort of delirium occasioned by the suffering. Gangrene commenced on the next day, but was limited by the efforts of nature alone, and the patient is actually cured.

In a third case, that of a young woman in whom the anchylosed limb was fixed at a right angle, the straightening was incomplete. M. Louvrier applied a piece of wood to the anterior part of the knee by means of which he hoped to press the limb into its natural position; but an eschar formed on the next day and the patient died in six weeks.

In another patient who died from other causes, the articular extremity of the tibia was found to be luxated upon the posterior part of the femur, the internal condyle of the latter being fractured.

The number of these accidents, however, being small [!], the opinion of the reporters would be less unfavourable, were the ill effects balanced by real advantages; but as the limb after operation is as immoveable as an artificial support, they conclude:

1. That the application of the machine of M. Louvrier is followed by an instantaneous straightening (*redressement*) of the anchylosed limb.
2. That it is not ordinarily followed by any severe symptom, primary or consecutive.
3. That when these accidents are produced they are frightfully severe, and are ordinarily followed by death.
4. That none of the patients operated upon by this method have entirely recovered the free motions of the anchylosed articulation. We therefore report to the minister that the machine of M. Louvrier, although ingenious, is dangerous in application, for it will be always impossible to determine the nature of the anchylosis and to foresee the conditions which would offer some chances of success for its employment.

[The barbarousness of this most heroic chirurgery needs no comment from us to prevent its adoption. The facts, however, are well worthy of record.]—*Bull. de l'Acad. Roy. de Méd.* Nos. xiii, xiv, xv, xvi. *Avril* et *Mai*, 1841.

Ligature of the Temporal and Facial Arteries in a Case of Epilepsy. By M. Velpeau.—A man, thirty-six years of age, who had been affected with epilepsy for seven years, which followed a fright, was admitted on the 29th of March last into the hospital of *La Charité*, under the care of M. Velpeau. The attacks had occurred eight or ten times in a month, but daily for the last three months. He had some very severe attacks in the hospital. On the third day from his admission, M. Velpeau, emboldened by some facts scattered here and there in science, and which have hitherto passed almost unnoticed, tied the two temporal arteries. On the same day the patient had another fit, but slight, and on the following day he was perfectly tranquil. On the 4th of April M. Velpeau compressed the two facial arteries on the borders of the inferior maxilla. The fit did not return, and on the 5th of April the surgeon tied the two facial arteries. The patient quitted the hospital on the 15th of April, only having had one fit since the 5th, although for months he had not passed a day without at least one attack. He has promised to return to the hospital occasionally. The case is interesting, though further observation is of course necessary to show whether the ligature of the arteries was the cause of the cessation of the fits.—*Bulletin Général de Thérapeutique. Avril* 15 *et* 30, 1841.

Good Effects of the Extract of Belladonna in the Reduction of Paraphimosis. By Dr. Mignot, of Bordeaux.—A child, three years and a half old, was the subject of severe paraphimosis; the glans red, swollen, and tender; the prepuce strongly drawn back, forming a thick and apparently adherent ring, the constriction of which completely stopped the circulation. This state had lasted eight days, and the sufferings were excessive. Reduction being impossible, leeches were applied to the perineum and hypogastrium; cooling drinks, emollient enemata, cataplasms, lotions, and hip-baths were used, but they only gave slight relief and but for a short time. The strangulation became more menacing, and all the symptoms were aggravated; the glans was bluish and gangrene was threatened, when M. Mignot employed frictions around the glans, with an ointment composed of thirty parts of simple cerate to twelve parts of extract of belladonna. Under the influence of this remedy the circle of constriction relaxed, dilated, and the tissues gradually recovered their normal condition, without loss of substance or suppuration following.

The second patient had acute balanitis, brought on by a severe gonorrhœa, and followed by paraphimosis. The patient refused operation although gangrene was threatened, when the belladonna was applied, which induced relaxation and rapid amendment. It was also applied in a case of phimosis accompanied by chancres and a sympathetic bubo, and three days after its employment the dilatation of the preputial orifice was complete.—*Bulletin Général de Thérapeutique. Avril* 15 *et* 30, 1841.

On the Employment of Cold Affusion in the Treatment of Acute Hydrocephalus. By Dr. Münchmeyer, of Verden.—Dr. Münchmeyer observes that the medical world is greatly divided in opinion as to the value of this remedy; some persons greatly extolling its efficacy, while others regard it as altogether useless. He considers it to be a most important remedy, and one which will often save life when all other means have been useless. One great reason why cold affusion has met with so few supporters is to be found in the misconception which has prevailed with reference to the proper time for using it. It is certainly not always advisable to resort to it, and it should never be forgotten that its mode of action differs essentially from that of cold when kept constantly applied to the head. In the employment of cold affusion it is the secondary action of cold, as well as the sudden shock to the system produced by the mode of its application, from which benefit is expected, while in the case of cold lotions to the head it is the primary action of cold which is obtained. Cold affusion then must not be looked upon as a directly antiphlogistic remedy, nor is its employment indicated during the early inflammatory stages of hydrocephalus, but rather when effusion, the consequence of inflammatory action has taken place, and a tendency to paralysis exists. After the subsidence of the violent symptoms of the disease, and when the patient has sunk into a comatose state, with a pale countenance occasionally suffused with a flush, dilated pupils, strabismus, and slow pulse, this remedy will frequently prove of excellent service.

In order, however, for benefit to be derived from it, it must be employed in an efficient manner. Dr. Münchmeyer directs that the patient should be taken out of bed, stripped of his clothes, and wrapped up in some simple covering (if waterproof the better), which leaves only his head exposed. He should then be placed in a sitting posture in a bath or tub, and the person who administers the affusion should mount on a chair and pour cold water upon his head, in a moderate stream from the height of five or six feet. This may be continued for a minute or two, and repeated twice or thrice. The patient should then be wrapped up in a warm sheet and placed in bed, where he should remain till it is thought proper again to have recourse to the remedy. At first, it will probably be requisite to repeat the affusion, in the course of an hour and a half or two hours; but as the patient improves the interval may be longer, so that at last it will not be necessary to employ it above two or three times daily.

The immediate effect of cold affusion is, that the patients awake from their comatose condition and begin to cry violently, which they continue to do so long as the water is poured upon them. They afterwards appear exhausted and pale, the skin is cool, the pulse small and very frequent. When placed in bed they usually fall into a dose, the pulse becomes more regular, and the warmth of the skin returns. By degrees, as with the repetition of the remedy the patients improve, they begin to have sound sleep, from which they awake in the possession of all their senses, recognise those by whom they are surrounded, and cease to squint. At the same time too a sweat, frequently of a critical nature, breaks out upon the whole body, and during its continuance the employment of cold affusion is very hazardous. The patient's sleep becomes more refreshing, and the comatose condition recurs at longer intervals; he begins to notice what goes on around him, the head regains its natural temperature, and the febrile symptoms disappear. The employment of affusion must, however, still be continued for some days, since relapses very frequently occur.

The paper is illustrated by five cases. In three the employment of cold affusion was perfectly successful, in one it produced temporary amendment, and the death of the patient was to all appearance owing to the apathy of the parents, who neglected to persevere in the treatment, while in the fifth convulsions and death followed affusion while the patient was perspiring profusely.—*Hannoversche Annalen.* Band v. Heft 4.

Poisoning by a Tobacco Enema. By M. Tavignot.—A strong man, aged fifty-five, who had laboured for some time under dysuria from enlarged prostate, and more recently suffered from the presence of ascarides in the rectum, was subjected to the action of a tobacco injection, made by a decoction of 12 grs. of the tobacco in 6 oz. of water. Seven or eight minutes afterwards, the patient appeared in a slight stupor, with cephalalgia, and unusual paleness of the face. He complained of pain in the abdomen, and his answers to questions were troubled. Two purgative injections were successively administered. A stimulant potion was given; sinapisms applied to the inferior extremities, and blood taken to the amount of three *palettes*. Paleness became more and more marked, respiration more and more laboured, stupor, intelligence altogether lost; convulsive movements of the arms, then of the legs, and afterwards of the whole body, which progressively augmented during six or seven minutes, and were succeeded by extreme prostration. The patient fell into a comatose state and died.—*Revue Médicale. Décembre*, 1840.

On the identical Composition of Fibrin and Albumen. By M. Liebeg, of Giessen.—M. Liebeg states that he has been able to dissolve pure fibrin in a saturated solution of nitre, at a temperature from 50 to 56 degrees. The fibrin becomes gelatiniform, merely leaving a few flocculi, which are insoluble. The filtered fluid possesses all the properties of albumen, and the composition of both is exactly the same. It is as follows:

Carbon	48
Hydrogen	74
Nitrogen	14
Oxygen	11

M. Liebeg has also precipitated albumen under the form of globules, by adding a sufficient quantity of water to serum which had been neutralised by an acid, and he has likewise obtained fibrin from the blood-globules, by the proceeding described by M. Denis. Lastly, by adding a little caustic potash to albumen, M. Liebeg has precipitated it under the form and with the properties of casein, by means of alcohol.—*Gazette Médicale de Paris.* 3 *Avril*, 1841.

Memoir of the Case of a Gentleman born Blind, and successfully operated upon in the eighteenth year of his age; with Physiological Observations and Experiments. By J. C. August Frantz, M D. M. R. C. S.—The young gentleman who is the subject of this memoir had been affected from birth with strabismus of both eyes; the right eye was amaurotic, and the left deprived of sight by the opacity both of the crystaline lens and of its capsule. At the age of seventeen, an operation for the removal of the cataract of the left eye was performed by the author with complete success. On opening the eye for the first time, on the third day of the operation, the patient described his visual perception as being that of an extensive field of light, in which every thing appeared dull, confused, and in motion, and in which no object was distinguishable. On repeating the experiment two days afterwards, he described what he saw as a number of opaque watery spheres, which moved with the movements of the eye, but when the eye was at rest remained stationary, and their margins partially covering one another. Two days after this the same phenomena were observed, but the spheres were less opaque and somewhat transparent; their movements were more steady, and they appeared to cover each other more than before. He was now for the first time capable, as he said, of looking through these spheres, and of perceiving a difference, but merely a difference, in the surrounding objects. The appearance of spheres diminished daily; they became smaller, clearer, and more pellucid, allowed objects to be seen more distinctly, and disappeared entirely after two weeks. As soon as the sensibility of the retina had so far diminished as to allow the patient to view objects deliberately without pain, ribands differently coloured were presented to his eye. These different colours he could recognise, with the exception of yellow and green, which he frequently confounded when apart, but could distinguish when both were before him at the same time. Of all colours, gray produced the most grateful sensation: red, orange, and yellow, though they excited pain, were not in themselves disagreeable; while the effect of violet and of brown was exactly the reverse, being very disagreeable, though not painful. Brown he called an ugly colour: black produced subjective colours; and white gave rise to a profusion of *muscæ volitantes.* When geometrical figures of different kinds were offered to his view, he succeeded in pointing them out correctly, although he never moved his hand directly and decidedly, but always as if feeling with the greatest caution. When a cube and a sphere were presented to him, after examining these bodies with great attention, he said that he saw a quadrangular and a circular figure, and after further consideration described the one as being a square, and the other a disc, but confessed that he had not been able to form these ideas until he perceived a sensation of what he saw in the points of his fingers, as if he really touched the objects. Subsequent experiments showed that he could not discriminate a solid body from a plane surface of similar shape; thus a pyramid placed before him, with one of its sides towards his eye, appeared as a plane triangle.

Two months after the above-mentioned operation, another was performed on both eyes, for the cure of the congenital strabismus, by the divisions of the tendons of the recti interni muscles, which produced a very beneficial effect on the vision of the left eye; and even the right eye, which had been amaurotic, gained some power of perceiving the light, and, from being atrophied, became more prominent. Still it was only by slow degrees that the power of recognising the true forms, magnitudes, and situations of external objects was acquired. In course of time, the eye gained greater power of converging the rays of light, as was shown by the continually increasing capacity of distinct vision by the aid of spectacles of given powers.—*Proceedings of the Royal Society.* 1840–1841. No. 46.

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ART. I.—ARMY MEDICAL REPORTS.

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It was an apothegm of the ancient Jews, that "no man discharged his duty to his country, who died, without having planted a tree, built a house, and left a child behind him." If I was asked to suggest an improvement of the saying, I would intimate that the *physician* is obnoxious to the charge of neglect of duty to the community, who passes through life, without having at least attempted to discover some new fact, or verify some already expressed hint, which may sustain the relationship of an improvement, either directly, or indirectly to the ars medica; leaving it for others to clothe the proposition in the precise and appropriate language of an axiom.

It is with the hope of being able, if not to exhibit an undiscovered truth, at least to furnish evidence in regard to the comparative worth of some of the weapons with which we ordinarily combat disease, that the author of the present paper ventures to appear in the pages of your journal.

For the last seven years, the Power that rules his destiny has afforded him opportunity to observe diseases, under the influences of the various climates, and the sundry circumstances which are supposed to modify complaints, as well as constitutions, in sections of the United States, varying from the twenty-sixth to the forty-fifth degree of north latitude, and through an extent of longitude, included between the Atlantic coast and the western limit of Arkansas.

It is proposed, in the series of essays, which the writer will offer for publication in your periodical, if they should prove acceptable, to limit attention, to a consideration in a general way, of the cases which have fallen to his lot, as one of the medical staff of the army; and he would here, in limine, bespeak the indulgent charity of the censors, whilst he pleads in justification of his attempt to confirm the opinion of the wavering, or dispel the doubts of the skeptical, a sense of bounden duty to his professional friends; and in excuse for its defects, that he lacks the facile skill which practice alone can give, in catering for the public taste.

The writer got an introduction to the diseases, prevalent in the army, at Fort Gibson, a post situated on Grand River, two miles above its entrance into the Arkansas, in the winter of 1833–34. This fort, whether deservedly or not, sustains the character of "charnel house of the army." Certain it is, that during the year 1834 and part of 1835, no term can be found in any language, which would do injustice to its character for insalubrity, if we regard only the number of cases within its chain of sentinels, and the mortality which made the scene so tragical. During the summer of 1834, most of the troops west of Arkansas, dragoons as well as infantry, were on distant duty in the prairie: the former in a campaign to the Pawnee towns on the border of Mexico, and the latter building new posts on the Canadian and Red fork of the Arkansas. They all returned to the garrison about the close of summer with a very large sick report. The commands, therefore, were exposed to other influences than those which exist at Fort Gibson, and in justice to the good name it erst aspired to, the fact ought to be recollected. However, that the post would have been unhealthy, might have been inferred from à priori reasoning, if exposure to vicissitudes of temperature, and proximity to extensive low grounds, in a southern latitude, favour the supervention of disease.

During the writer's residence at Fort Gibson, the mercury in Fahrenheit's thermometer fluctuated through one hundred and twenty-seven degrees; rising in the summer months to 116, and falling in the winter to 11 minus zero! The almost unparalleled elevation indicated cannot be attributed to any inaccuracy of the instrument, or any fault in its site; the observation having been registered from one of two thermometers, which exhibited the lowest elevation of the mercury, both being placed in an airy position, under the piazza of the hospital, which afforded an effectual shade from the sun's rays.

The valley of the Arkansas is subject to occasional inundations from the river, to an extent which often renders the labour of the husbandman of precarious avail, whilst it makes some parts of it, almost uninhabitable. I write with literal regard to truth, when I say, that in the vicinity of the river, from its mouth to the Verdigris, a distance of perhaps seven hundred miles by water, the traveller will scarcely meet a rubicund visage, or a face and form bearing the impress of good health. Perhaps an exception ought to be made in favour of those who more happily reside, in one or two of the towns on the river, but if the whole truth were gazetted, it is believed a statement of facts would not do even them any considerable credit for salubrity.

Having in view to exhibit recollections of cases which have come under my observation in the army, it may be proper to begin at the beginning. The present essay will relate, therefore, to the acute cases of the winter months, and the chronic forms of disease which were continued in the hospital, at Fort Gibson, since the previous autumn. A consideration of the most interesting cases, viz. the fevers of the summer months, may constitute the second paper of the series.

The prevailing diseases of the winter derived their characteristics from vicissitudes of temperature:—Pneumonia, Pleuritis, Acute and Chronic Bronchitis, and Rheumatism, Catarrh, Phthisis Pulmonalis, and Ophthalmia, made up the register of cases admitted to hospital. The patients who were continued from the previous summer, and autumn, laboured under intermittent fever and its sequelæ, enlargement of the liver and spleen, chronic inflammation of the mucous coat of the stomach and bowels, assuming the form of dyspepsia, chronic dysentery and diarrhœa.

The first named inflammatory affections were treated in the ordinary way, and with perhaps a common result. If any fact impressed itself with signal force on my attention, it was the eminent advantage of copious abstraction of blood from a large orifice, in the incipiency, or at least at a very early stage, of the disease. My observation affords me satisfactory evidence of the oft-repeated truth, that it is not so much the large quantity of blood abstracted, within the first few days of an intense inflammatory affection, as the effect produced by a first venesection, on which we should rely in the management of this class of diseases. Most of the cases of pneumonia and pleuritis yielded readily, after the tone of the system was thus reduced, to counter-irritation over the seat of disease,—an occasional dose of calomel and opium, and gentle antimonial diaphoretics.

The cases of acute bronchitis required ordinarily a resort to the lancet, after which they subsided for the most part, under the operation of common expectorants. When, however, the symptoms were unusually persistent, an irritation more or less extensive, over the surface of the chest, by blisters, or antimonial ointment continued for a greater or less time, rarely failed to extinguish the disease.

The catarrhal affections were made to succumb generally by a resort to an emeto-cathartic of sulph. magnes. and antim. tartarizat., followed by the expectorant and sudorific compounds, usually exhibited in such cases, with due attention to clothing, and avoidance of exposure to the weather. This form of disease, when neglected, betrayed a constant proclivity to bronchitis.

Many of the cases of acute rheumatism creditably sustained the character of this corps of the "grisly troop," for obstinacy.

My experience in the management of this affection has persuaded me that too much danger is apprehended of favouring its conversion to the sub-acute or chronic form, and its metastasis to the vital organs by liberal depletion. My success in its treatment has been more satisfactory, when in the forming stage I have abstracted blood liberally, and I have not witnessed the untoward effects which we are taught to fear from the measure. The symptoms have frequently exhibited, in the course of the disease, evidence of a pathological condition of the heart and pericardium, but not oftener, under my observation, when the lancet has been used, than when it was withheld.

Abstraction of blood by cups applied over the seat of pain, when the larger joints are involved, is a remediate measure to which I am much attached, from observation of its advantages, though in order to derive the utmost benefit from the scarificator, it is necessary that the operation should be performed in an effectual way—at least half a pint of blood should be taken from the knee, for instance, when much swelling and pain exist. I am persuaded that too little attention is given by the generality of practitioners to the condition of the first passages in acute rheumatism, having almost invariably found the disease much less refractory when an active purge is given in the commencement, and occasionally repeated during its progress. When the attack has not yielded to the means here noticed, with their common-place co-adjutants, I have rarely known it continue many weeks under the influence of minute doses of calomel and dov. powder. In the chronic form of the disease I have seen marked benefit result from the use of the vinous tincture of colchicum, when the synovial appendages of the joints might be presumed to constitute the seat of pain, and when the fibrous structures are principally implicated, my experience has induced me to rely on the mistura guaiaci, with more confidence than on any other individual article. The tincture of phytol. decandr. has in several instances commended itself to my favour as a remedy in this affection, the preparation being made from the berries; and the popular prescription of nit. potass. in diluted alcohol has seemed, in some instances, to have a claim to respectful regard. The usual adjuvants, viz. blisters, liniments, friction, &c. have been brought in requisition, but principal reliance has been placed on the means indicated above.

Phthisis pulmonalis at Fort Gibson, as elsewhere, merited its title to a place in the front rank of the opprobria medicorum. I allude to it here, with the sole view of remarking, that there is not perhaps, on the earth's surface, an *inland spot* more ineligible for a consumptive patient; the temperature sometimes undergoing a change of thirty degrees in a few hours. The prevailing winds during the summer are from the southwest, bearing on their wings the most oppressive heat, but ever and anon, old Boreas, inflating his lungs, asserts his empire, and from his habitation in the Rocky Mountains, sends his chilling breath over the plains below, scattering almost as many evils as fable attributes to Pandora's box. I will remark, en passant, that among the palliatives used in the management of the cases of pulmonary consumption, large doses of opium and sulphate of iron, as recommended I believe by Dr. Morton, were exhibited with a view to control the colliquative diarrhœa, and with apparent benefit.

There prevailed at Fort Gibson an undue proportion of cases of acute and chronic ophthalmia. If any peculiar circumstances exist there to excite this form of disease, I am unacquainted with them. In many instances the cases were allied to rheumatism, and so far they may be accounted for; but a majority did not bear any such relationship, and I can only attribute its frequent occurrence, to the abrupt atmospherical vicissitudes acting upon, and determining disease in organs habitually predisposed to deranged action, by exposure to the intense light of the sun operating *directly* upon them, and *indirectly*, by reflection from the white sand, which constitutes the superficies of the soil in that vicinity.

It may be remarked here, that ophthalmia prevails to a very large extent among the Osage Indians, who inhabit a section of country on the head waters of Grand river. The frequency of the disease among the Indians has been ascribed to a custom which exists among them, of plucking out the hair of their supercilia, thus depriving the eye of the protection from the rays of the meridian sun, which this natural contrivance affords. My experience in the treatment of this disease has not enlarged in any considerable degree my knowledge of the means of combating it successfully. Most of the varieties of inflammation of the eye and its appendages were occasionally presented; the predominant form was conjunctivitis;—next, in frequency of occurrence, was sclerotitis; a few cases of iritis, of syphilitic origin, contributed to make up the variety. The conjunctival form, in its advanced stage, generally implicated the cornea, which became obscure, and occasionally ulcerated.

The cases were managed in the way taught in the schools, and throughout their course furnished very little theme for original remark. They have only left on my mind, at this distance of time, the impression, that in the advanced stage of conjunctivitis the nit. argent. collyrium is, by a majority of practitioners, used of insufficient strength; that in obscurity of the cornea, from protracted inflammation, the lunar caustic should be applied, without stint in substance, to its surface, and that the system should be made to feel at once, the mercurial impression. My acquaintance with the numerous cases which occurred there, gave me opportunity to test the value of aqueous solution of opium, applied to the eye, where great intolerance of light exists. The remedy has my unqualified approbation, having derived more advantage from it, in this way, than from any other application.

Having thus disposed in a discursive way of the prevalent diseases of the winter season, those cases which were continued in hospital from the previous summer come next to be considered.

A majority of these patients it has been remarked, laboured under protracted intermittent fever, and its sequences. It need not be said that in malarious districts of country, this form of disease, which, if the doctrines of the schools be correct, can only originate during the heat of summer, may nevertheless exist throughout the whole year. It may be affirmed, indeed, that in southern latitudes it exercises most obstinate sway in the cold season; its right to empire seeming to be yielded to its more desolating brothers, of the remittent and continued types, during the months of their reign; and it is remarkable that it is very apt to make the quondam subjects of *their* rule, the victims of *its* operations. I am so well satisfied of this fact, that I have become a convert to the opinion of MacCulloch, which maintains as a general rule, that patients will not recover from the diseases of this family, so long as they remain in the country in which they acquired them. To arrest intermittent fever is the easiest thing imaginable, but to confer, by medication, exemption from subsequent attacks—"aye there's the rub." The revolutionary action of the mercurials will not do it—no attention to diet, no avoidance of exposure, will do it; no course of tonics, given with a view to invigorate the impaired energies of life, will effect the object. Nothing in fine, will afford immunity from occasional returns of the paroxysm, but removal from the country. I have good reason for believing that a short residence in a section where the disease does not exist, will afford comparative security from future attacks, but what is the shortest limit of absence, which may suffice in ordinary cases, my observation does not enable me exactly to determine. It is not maintained that all who have had fever and ague must absent themselves from the region of country in which they became sick—spontaneous instances are of frequent occurrence, in the northern latitudes, where the patient will completely recover, after one or two series of paroxysms. Here the cause of the disease may be supposed to have but an ephemeral existence, or the malaria is in so slight concentration, as to require some accidental disturbance of the economy to enable it to institute its action; but in the southern climates, where the disease is endemical, I had almost said epidemical, nothing short of an alibi will afford protection from relapse.

The writer has not in his possession a record of the cases of intermittent fever, which have been the subject of his charge during the last seven years, but he is safe in saying, that the number certainly amounts to some thousands. In regard to the quæstio vexata—of the expediency of administering medicines addressed to the primæ viæ, preliminary to the exhibition of the article having direct control over the paroxysms, his experience teaches that such precautionary measure is not so indispensable to the *interruption* of the disease, as was once believed. He has instituted sundry experiments, at different times, and under a variety of circumstances, with intent to get at the truth on this subject. All his inquiries persuade him that, very often, the time occupied in this preparatory process is, in effect, thrown away. When the symptoms manifest a deranged state of the stomach and bowels, of course this condition must be removed, by the appropriate medicines, in limine. Occasionally we meet with a subject of this form of disease, the tone of whose system we are required to reduce by blood-letting, in advance of the exhibition of remedies during the interval; but in a great majority of cases we will best succeed in abbreviating the sufferings of the patient, by entering at once on the use of the bark, or other article selected; for it will be found in those localities where the disease prevails most extensively, that we will not derive compensation for the suffering, involved in the repeated returns of the paroxysm, whilst we are preparing the system for the anti-febrile remedy, in any diminished liability to its recurrence, when it shall have been interrupted. An exception may be made to the above statement, in favour of the doctrine of critical days, or the alleged tendency of this disease to septenary periods, both in its approach and subsidence. I am well satisfied, that this quality is one of the elements which make up the character of intermittent fever; having in repeated instances secured to patients a greatly prolonged term of comparative health, by avoiding all interference, where extraordinary indications did not exist, until the day preceding the seventh, in quotidian, and the fourteenth in tertian, from the date of the attack, when I have been in the habit of exhibiting the quinine, in doses of from ten to fourteen grains during the twenty-four hours; and when the patient has been subject to repeated attacks, on slight exposure, I have given the article in the quantity above indicated, on the sixth and thirteenth days (according to the type of the affection) after the last paroxysm, seemingly, at least, with the effect of preventing a recurrence of the chill for several weeks.

In all the types of intermittent fever, I have relied mainly on quinine, giving it in the shape of super-sulphate, in solution. It is exhibited usually in divided doses, during the apyrexia.

It is no mean praise of the article to say, that I have never witnessed its failure to put an immediate stop to the disease after the second paroxysm; in ninety-nine of an hundred instances, there is no return of that *series* after the exhibition of the quinine.

I have given a fair trial to all the various articles recommended as substitutes for the bark, but though many of them will certainly arrest the paroxysms, in time, none are entitled, in my estimation, to respectful notice, in comparison with this ipse agmen.

The tourniquet practice has failed in my hands, and the plan of bleeding in the cold stage has not, under my observation, been productive of the almost miraculous cures, which Mackintosh, and others, give it credit for. I will confess, that I entertained from the first strong prejudices against the measure, though it came highly recommended by authority; and it is perhaps due to that authority to admit, that the idea comported so illy with all my pathological notions, in relation to the disease, that I have not frequently resorted to it. I am familiar with the ratiocination, by which the advocates of the practice explain the removal of the blood, in the congested viscera, but to my mind, it is not satisfactory. If that portion of the venous system, distributed upon the surface and extremities, was in a state of repletion, it might be alleged that by abstracting its contents, the blood, accumulated in the internal organs, might be coaxed to the periphery, to supply the approach to vacuum, resulting from the abstraction, and that thus, the balance of circulation might be restored.

In the cold stage of intermittent fever, and in the congestive fevers, of which it is the type, the sanguiferous system of the entire surface, and extremities, is in a state of comparative emptiness. This vacuity of these vessels is in truth an essential condition of the pathological state which exists—the measure recommended is calculated, in its very nature, to aggravate this symptom, and, to my comprehension, it is not apparent how it can relieve the suffering organs, constituting the seat of the congestion. I am aware that I incur the imputation of medical heresy, but I repeat that the process of reasoning, by which authors enforce the advice to bleed from the arm, in congestion of the larger viscera, has never seemed to me even plausible; and moreover, a frequent resort to the practice, in forms of disease in which congestion gave character to the case, has not tended to dispel my misgivings of the soundness of the doctrine. I can readily conceive that in those cases which have ultimately terminated happily, in my hands, reaction was due to the warmth externally applied—the extensive counter-irritation of the surface, and the remedies addressed to the stomach and bowels, rather than to the venesection,—I had almost said, in spite of it.

It may be true that abstraction of blood, during the chill, where the vital forces are not oppressed beyond the power of successful resistance, may moderate the subsequent reaction, and thereby, in some instances, contribute to the cure; but a very large majority of our patients, in sections of the country where the disease prevails to its greatest extent, will not bear with impunity such subduction of vital energy as is implied in the operation. The danger of increasing the hydropical diathesis in most of the protracted cases is not, I conceive, the least evil to be apprehended from the practice.

The cases of chronic enlargement of the liver and spleen, were treated, the first, by mercurials, given to the extent of slight ptyalism—counter-irritation over the diseased viscus, by blisters—cupping; and the empl. hydrarg. applied to the gently irritated surface, with attention to the minor considerations, which suggest themselves to every physician. The engorgement of the spleen yielded, in a majority of instances, to similar means, (the mercurials being omitted, for the most part), with the additions of the preparations of iodine, used externally and internally. The hydropical affections, bearing the relationship of sequelæ to the diseased conditions named, subsided ordinarily under the methodus medendi instituted for the removal of the latter. Squill and digitalis were generally conjoined to the mercurials, where there existed anasarca, or ascites. An occasional dose of comp. pulv. jalap. uniformly facilitated the removal of the infiltrated serum. Subsequent to the removal of the engorgements, and the resorption of the effusions, the patients were put under the influence of a tonic course.

I had here an opportunity of testing the claim to notice of an indigenous article of medicine, but slightly used, I apprehend in any country. I allude to the Indian hemp—the apocyn. cannabinum. I am aware that the profession is not to be informed that it possesses medicinal virtues, but the opinion is entertained that if it were better known, it would be more esteemed. I have used it with marked benefit, in hydropic diseases, in form of decoction of the root, in such quantity as slightly to nauseate the stomach. It has rarely failed in my hands to excite free diuresis. The objection to the article is, that it is very apt to excite vomiting, and sometimes, when it acts on the bowels, painful tormina.

Chronic dysentery was of very frequent occurrence. Its subjects were, in a majority of cases, those whose general health was impaired by repeated attacks of int. fever. It presented itself in every grade of violence, and often proved obstinate and intractable. The medication consisted in cupping and blistering over the region of the colon—the exhibition of calomel, opium, and ipecac. followed up at intervals with castor oil,—mucilaginous drinks, and opiated injections, with an entire avoidance of all ingesta which could in any wise add to the irritation of the mucous tissue of the larger bowels; but the internal remedy which most commended itself to my favour, was the prescription of Dr. Stokes of Dublin: viz. the hydr. cum. cret., with, and without, opium. It is, in my estimation, an article having high claims to confidence. The acq: camphorat., et elix. vit: with addition of sol. sulph. morphiæ, at regular intervals of a few hours, has in numerous instances controlled the affection, when other remedies have failed.

A memorable case of dysenteric affection limited to the rectum, occurred during the time to which these remarks relate, which has left an enduring impression on my memory. It was that of Lieut. W—— a promising young officer who was convalescent from a grave form of bilious remittent fever, and whose morbid appetite was not to be satisfied but by such indulgence, as endangered, and ultimately cost him his life. The case was managed on general principles. It would be unprofitable, therefore, to narrate the particulars; it is sufficient to have intimated its issue, but I would here take occasion to remark, that this portion of the intestinal canal has always seemed to me more isolated from the rest of the body, than almost any other viscus. It has fallen to my lot subsequently, to witness inflammatory affections of this intestine, pursuing an onward course, unchecked by medication, to disorganisation, and death; leaving the impression that however intimately it may be connected by sympathy, in some of its diseased conditions, with the system at large, its morbid states can scarcely be reached by constitutional remedies, and my experience teaches, that local appliances do not afford so much satisfaction, as in most other cases of inflammation, in which the whole system is ultimately brought to sympathise with an affection, at first purely local.

The common forms of diarrhœa were readily controlled by the opiate, astringent, and cretaceous preparations, with the occasional addition of minute quantities of calomel. It occurred to the writer, to witness several cases of rather a rare form of disease, whilst on duty in Arkansas: viz. gangrene. The subjects were all of the Cherokee, and half-breed Indians, who live in the vicinity of the fort. In regard to the mooted question, whether this affection is due in all cases to some abnormal action of the mercurial medicines, opportunity was afforded me of arriving at a satisfactory conclusion. The cases were all well marked, and occurred in children who had not taken medicine of any kind, until my attention was directed to them. In all these instances the disease came on without the slightest agency of mercurials. In one case, the affection extended to the alveolar process of the upper-maxillary bone, which became necrosed, to an extent involving the site of three of the first teeth. This portion of the process was removed, the teeth having fallen out, and the disease in the soft parts, being arrested by blisters, and the free application of argent. nitrat., together with the use of detergent epithems, into which the Peruvian bark and the chlorides of lime and soda entered, the patient ultimately recovered.

JOSEPH J. B. WRIGHT, M. D.
Ass't Surgeon, U. S. Army.

Fort Armistead, E. Florida, March, 1841.

Art. II.—CASES OF MAMMARY ABSCESS, TREATED BY COMPRESSION.

To the Editor of the Medical Gazette.

Sir:—If you think the following article worthy of a place in your valuable periodical, its early insertion will oblige, sir,

Your most obedient servant,
JOSEPH BELL.

Barrhead, Oct. 16, 1841.

In the part of the Med. Gaz. for last month, there is a valuable extract from an article "On the use of Compression in the Treatment of Mammary Abscesses," by MM. Trousseau and Contour, and which appeared in the *Journal des Connais. Méd.-Chirurgicales*, Janvier 1841.

Having experienced very great benefit from the employment of compression in such cases, I have been induced to send the present communication for publication, in order to attract as much attention as possible to a means of cure which, though frequently brought under the notice of the profession, yet, so far as I can ascertain, is very seldom employed.

The editors of the Dublin Medical Press favoured me by publishing the following case and remarks in their journal for 23d December, 1840.

May 12th, 1837. Mrs. C., ætat. 26 years, mother of two children. She is of ordinary stature, dark complexion, considerably emaciated. Complains of severe pain of left mamma, which is discharging large quantities of purulent matter from a small opening situated a little above the nipple, on the outer aspect of breast, which measures in circumference 26½ inches; on its superior aspect it measures 12 inches from base to nipple, and 9 inches inferiorly.

It is very hard and painful, particularly at the upper part; the hardness is irregular and knotty; integuments over upper side red and tender; pain extends to axilla of same side, and down arm to fingers; some milk comes occasionally from nipple; the lacteal secretion is very scanty in right mamma; general health much impaired; has no appetite; tongue covered with a dirty white fur; thirst; skin hot and dry, but at night is covered with a profuse perspiration; pulse 120, feeble; can obtain no sleep from pain; bowels said to be regular; has been confined to bed nine weeks; suppuration commenced eight days after the birth of her youngest child, now three months old.

The abscess was opened by her medical attendant about a fortnight afterwards, from which time she has constantly applied linseed meal poultices, according to his directions.

Applicat. fascia Mamm. sinistr. et habt. haust. Anodyn. h. s. ex Sol. Mur. Morph. gtt. xxx.; Tr. Hyos. Nig. ʒj.; Aq. Cinnamomi, ℥j. M.

14th.—Great relief of pain instantly followed application of the bandage. To-day she has no pains whatever; she looks more cheerful; has slept well for the last two nights; appetite improved; tongue cleaner; skin more natural; perspiration at night less; pulse 84; bowels regular; breast now measures only 17 inches in circumference, 6 inches from base to nipple superiorly, and 5 inferiorly; hardness much less, and discharge considerably decreased; redness of integuments gone.

Cont. fascia sed intermitt. haust. Anodyn.

18th.—Bandage came off on the night of 16th; I could not find it convenient to apply it till to-day. Breast more swollen and painful than on the 14th, but not near so much as it was previous to application of bandage; hardness increased, particularly in direction of left axilla; pulse 100; did not rest well last night; bowels costive.

Cont. fascia et habt. Ol. Ricin. ℥j.

21st.—Breast has been always easier since the bandage was applied on the 18th. All pain is now gone; breast much reduced in size, it is now no larger than a small fist; discharge almost ceased; pulse 76; bowels freely opened by oil, and have been regular since.

Cont. fascia.

June 1st.—Breast is now well; general health good. Attendance discontinued.

Remarks.—The above case illustrates the beneficial effects that have resulted from compression in several cases of mammary abscess which have come under my observation. I have found it also exceedingly useful in cases of sinuses, which are frequently the sequelæ of mammary abscesses.

In one case the sinuses were of nine months' duration, and had resisted a great many applications, but were completely cured in ten days by compression.

This treatment is by no means new, although I believe it is not generally known. I was not, however, led to adopt it from any authority, but from a preconceived notion. It afforded me great pleasure to observe it strongly recommended by a writer in the *London Medical Gazette* (vide vol. xxii. pp. 389, 419.) This gentleman seems to think that the treatment had not been brought under the notice of the profession previous to the appearance of his paper on the subject. We find, however, the practice highly lauded by M. Jules Cloquet, in a clinical lecture on abscesses of the mammæ delivered in 1837 (vide *La Presse Médicale*, 1837.) He mentions a case of six months' duration, "treated to no purpose by all other means, which yielded to compression as if by enchantment." I intended to have published the first case which I treated by bandaging, when it occurred, but delayed doing so in order to test its effects in other instances, in all of which I have found it successful. I use a common roller about nine yards long, which I apply round the chest and shoulders, so as to make gentle and uniform pressure on the affected breast; openings are made in the bandage to allow free exit to the discharge. The greatest care must be taken to have the bandage equally applied, as, if it be allowed to press more on one part than another, we will to a certainty not only aggravate, but cause the very affection we are endeavoring to combat. In order, therefore, to be successful, the roller must be carefully and judiciously applied.

Since the above was written, I have treated five cases of mammary abscess with the greatest success by compression. Two of these I will now quote: in these instances I employed strips of adhesive plaister, as recommended by MM. Trousseau and Contour.

Case I.—Jan 6, 1841, Mrs. T———r, æt. 32 years, mother of four children. She is of full height, fine complexion, and of ordinary stature; a native of Ireland. Right mamma has suppurated, and is discharging, from an opening under nipple, a large quantity of purulent matter; breast much swollen, very painful, and hardened, particularly the under side, where the skin is red and tender; pulse 100; tongue foul; thirst; sleeps very little; is exceedingly restless; bowels costive.

Was delivered of a male child six weeks ago. Shortly after this her breast suppurated, and was opened by a surgeon on the 9th ult. She has been using poultices and ointments since.

Admov. fasc. Mamm. dextr. et habt. Ol. Ricini, ℥j.; Tr. Hyosciam. Nigr. ʒiss.; Aq. Cinnamom. ℥jss. stat.

7th.—Slept some last night; oil operated twice; bandage has come off this morning; pulse 96; mamma much easier; swelling less.

Continuentur omnia.

10th.—The bandage, either from the restlessness or the carelessness of the patient, cannot be kept properly applied; mamma not improved, but rather more painful and enlarged.

Strips of common adhesive plaster, about two inches broad, were applied round chest (somewhat in the manner used in the Bayntonian treatment of ulcers,) so as to make firm compression on breast, and, at the same time, to allow free passage to the discharge; a bandage was applied over the plaster in the usual manner.

12th.—Great improvement; pain, swelling, and discharge, greatly abated. Pulse 76; sleeps well.

Continuentur.

22d.—Mamma quite well; is as small as that of left side; no hardening; no pain even caused by firm pressure with the hand; opening has been healed since 16th. Attendance discontinued.

Case II.—March 22, 1841. Mrs. M'W——, æt. 22 years. A tall delicate female, fair complexion, a native of the north of Scotland, on the 6th inst. was delivered of her first child. She had a good recovery until the 14th, when her right breast became inflamed, and despite the usual remedies to procure resolution, suppuration took place; it was incised yesterday, when several ounces of yellowish matter escaped. The abscess is deep seated, and the breast is very much enlarged, exceedingly painful, and is discharging profusely; pulse 100; pyrexia.

Utat. Compress. Mamm. dextr. c. Emplas. adhesiv. extens. et fascia, more solito.

24th.—Mamma doing well; pain, tumefaction, and hardening, rapidly subsiding; health improving; feverishness gone.

27th.—Breast nearly well, but plaster has produced considerable irritation of the skin over which it was applied, causing abrasion in some places and much pain.

Intermit. Emplas. Adhesiv. sed. cont. fasc. et utat. Ungt. Simpl.

31st.—Mamma quite well; tenderness of integuments almost gone.

Remarks.—In Mrs. T.'s case I was led to employ the plaster in consequence of being unable to keep the bandage properly applied to the breast. Finding in her case that it retained its place much better than a simple roller, I have used it in all the other instances which have occurred to me since. This is an advantage which it possesses over the common roller; but, on the other hand, as will be seen from M'W.'s case, very great irritation of the integuments was caused by the plaster. The same effect was produced in two other instances. In these, however, the evil was obviated by substituting a finer quality of plaster (for that in common use,) sold here under the name of Leicester plaster. Not the slightest irritation or uneasiness was caused by its application.

I have been so well pleased with the result, that I shall use it in future in all such instances.

Perhaps it should be mentioned here, that Dr. M'Dowall, of Dublin, has invented an instrument for making compression in cases of mammary abscesses. In the Dublin Medical Press for Dec. 30, 1840, this gentleman in a note (referring to my communication which appeared in the previous number) states, "I have been in the habit of employing compression for some years past in those cases (abscesses of the mammæ,) and the result has been such as to lead me to coincide with Mr. Bell in his views on the subject. I have invented an instrument for the purpose, which I have found to possess many advantages over either the bandage or the other modes of compression usually employed. This little instrument is extremely simple, being composed of two springs curved in a peculiar manner, and crossing each other at right angles, having a pad at each extremity. In adjusting it, the extremities of the springs are drawn asunder, and the breast being placed between them, are allowed to close gently upon it: the stays may then be closed over it, or, if the stays cannot be worn, a small bandage round the chest will do. When thus fixed, the instrument holds the breast firmly, as if it were grasped by the hand, and can be used with very little trouble or inconvenience to the patient.

Whether or not this invention of Dr. M'Dowall be calculated to effect the object in view I cannot say, as I have neither seen nor used the instrument. If, however, it make sufficiently firm and uniform compression on the breast, it certainly must be a preferable means of treatment to either bandage or adhesive plaster.

In conclusion, I would observe, that from my experience of the use of compression in these cases, I can conscientiously join with MM. Trousseau, Contour, Dr. M'Dowall, and others, in strongly recommending the treatment to the profession, as most efficacious and speedy in its effects; alleviating much pain and suffering to the patient, and saving much time, trouble, and annoyance to the medical attendant.

From what I have witnessed of the employment of adhesive plaster, I consider that its application should be preferred to the bandage, as the former is not so easily removed either by the carelessness or restlessness of the patient as the latter, which, however, is even itself of admirable utility in the treatment of this really painful and tedious affection to which the mammæ are so liable, particularly at a time when a due performance of their function is so much required.

BIBLIOGRAPHICAL NOTICES.

Introductory Lectures.

We have received various introductory lectures, which have appeared to us generally well adapted to the objects which their authors had in view,—that of placing before the student the character of particular departments of the science; the mode in which the Professors design to teach it, with the claims it has on the attention of the student; and an occasional digression on the condition and prospects of the School to which they are respectively attached.

Of the lectures before us, three were delivered in the Jefferson Medical College, by Professors Bache,[1] Meigs,[2] and Dunglison.[3]

The *Lecture of Professor Bache* is strictly introductory to his subject, and contains an able and interesting sketch of the importance of the study of Chemistry, and the advantages that have resulted from its cultivation, not only to medicine, but to the useful arts and to science in general. We extract that portion of it which treats of its application to Medicine. It will give an idea of Professor Baehe's matter and manner.

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[1] Introductory Lecture to the course of Chemistry, delivered in Jefferson Medical College, Nov. 3, 1841, by Franklin Bache, M. D., &c. &c., 8vo. pp. 16, Philad. 1841.

[2] Introductory Lecture to a course of Obstetrics, delivered in Jefferson Medical College, Nov. 4, 1841, by Charles D. Meigs, M. D., &c. &c. 8vo. pp. 18, Philad. 1841.

[3] An Introductory Lecture to the course of Institutes of Medicine, &c., delivered in Jefferson Medical College, Nov. 1, 1841, 8vo. pp. 24, Philad. 1841.

"It is pharmaceutical and medical chemistry which it is my duty more particularly to teach in this College. And here, gentlemen, let me stop to inquire, is chemistry, in its applications to medicine and pharmacy, worthy of your regard? This is an important preliminary question; for if you follow the ensuing course under the erroneous impression that you can be respectable physicians without being chemists, your attention will flag, and the knowledge which you will derive from my lectures will be insignificant; but if I can convince you in the outset that an intimate connection subsists between chemical and medical science, and that a knowledge of chemistry is an indispensable prerequisite to the successful prosecution of your profession, I shall hope to secure your undivided attention.

"The applications of chemistry to medicine will now be briefly noticed; and first, of its application to physiology.

"Although it has been conceded that vital phenomena must be considered as regulated by a distinct set of laws, yet it does not follow that they cannot be elucidated by chemistry. Vital phenomena are the result of the reaction of organic particles; chemical phenomena, of inorganic ones. Hence physiology and chemistry agree in studying molecular attractions, occurring either within or without the precincts of vitality. As the anatomist separates the grosser parts, and detects differences in structure; so the chemist executes a more minute dissection, by demonstrating the chemical nature of the different animal solids and fluids. Thus it is that the science of physiology is based almost entirely upon the facts furnished by anatomical and chemical research.

"The subject of alimentary substances requires for its elucidation the aid of chemistry. By its means, the different kinds of food are analyzed, whether derived from the animal or vegetable kingdom, the peculiarities of each noted, and the relation which these peculiarities may bear to their nutritive power. In experiments relating to the vital process of absorption, the physiologist can hardly proceed a single step without the aid of chemical knowledge. The tracing of different substances, purposely introduced into the stomach to determine whether they afterwards pass into the blood and secretions, can only be performed by chemical tests, capable of detecting minute portions of matter, which elude the observation of the senses.

"The process of digestion cannot be successfully studied without the aid of chemistry. It is impossible to give an account of what is known in relation to this subject without constantly recurring to chemical principles. The gastric juice has been examined by a number of able chemists; still much remains obscure and unexplained. Its power, out of the stomach, to dissolve various alimentary substances, was demonstrated by Spallanzani and others; but for the production of true digestion, the nervous influence appears to be necessary.

"Of all the functions of the body, none have received more important elucidations from chemistry than that of respiration. Here true chemical changes take place, as is proved by a comparative analysis of the air taken into the lungs, and that expired. The chief product is carbonic acid, and hence it is fair to infer that charcoal undergoes a change in the lungs, similar to that which it suffers when it burns in the open air. Here, then, is a source of a large amount of heat; and, no doubt, the temperature of the body is mainly kept up by the function of respiration.

"If chemical principles alone cannot explain the function of respiration, it does not, therefore, follow that the changes which the air actually undergoes are the less important to be known; since a knowledge of these changes may lead to the enlargement of our resources in combating disease. It has been found that the formation of carbonic acid, in respiration, is diminished by sleep, by the use of spirituous and fermented liquors, and by the constitutional effects of mercury; while it is increased by muscular exertion and by the exhilarating passions. In what comparative quantities this acid may be generated in different diseases, no extensive series of experiments have yet been instituted to determine; but it cannot be deemed an unreasonable conjecture, that, in disease, important differences may be found to obtain in the products of the respiratory organs.

"Another important function is the production of animal heat, which cannot be successfully studied without a due knowledge of the properties of caloric, a subject which belongs to chemistry. Here is required of the physiologist a clear idea of quantity of heat, as contradistinguished from temperature; of changes of state of aggregation produced by caloric; and of the circumstances under which it is absorbed and given out. In relation to the constant liberation of caloric in the animal economy, which maintains a nearly uniform temperature, it may be said that one general principle prevails; namely, that, when, in any vital action, liquids are convertd into solids, heat is evolved.

"The mysteries of the nervous system are more likely to be explained by studying the imponderable fluids than in any other way. Mere volition causes muscular motion; and the seat of exertion seems to be in the muscle moved; but, in fact, its source is either in the brain or spinal marrow. That the exertion is thence propagated, is proved by the effect of cutting a small fibre, called a nerve, which forms the channel of communication between the brain or marrow and the muscle; whereupon the will becomes utterly powerless. The instantaneous power of volition in propagating an effect through the channel of a nerve, as it were through a conductor, naturally suggests the hypothesis of the passage of a fluid; and, from the analogy of the effect to electrical and galvanic phenomena, leads at once to the plausible conjecture that the fluid in question is some form of electricity or galvanism. What sustains this view are the well known facts that a muscle, recently separated from an animal, suffers violent contractions when a galvanic current is passed through it; and that nature herself has endowed certain animals having the nervous system largely developed, as the torpedo and other electrical fishes, with the power of giving electrical shocks. Besides, the experiments of Dr. Wilson Philip prove that digestion, and other functions dependent on nervous influence, after having been arrested by the division of the nerve going to the organ, may be restored by passing a current of the galvanic fluid from one cut extremity to the other.

"But it is not merely the healthy economy, whose functions are elucidated by chemistry. Many subjects, connected with pathology, receive important aid. In the treatment of the morbid effect of poisons, chemistry furnishes almost our only resource. By suggesting what substances, by chemical affinity, will unite with the poison, so as to render it inert, or comparatively harmless, we are instructed in the knowledge of counter-poisons. Thus, for preparations of anatomy, the best antidote is a decoction of some astringent vegetable; for nitrate of silver, common salt; for baryta and lead, solutions of Epsom or Glauber's salt; for oxalic acid, chalk or magnesia; for corrosive sublimate, the white of eggs; and for arsenic, the hydrated sesquioxide of iron.

"In calculous disorders, the physician cannot determine the proper curative measures without the aid of chemistry. Here it is necessary to know the chemical composition of the urine in health and disease, and to possess accurate analyses of the different kinds of gravel and urinary calculi. Without this knowledge, the practitioner is unable to discriminate between the different diseases of the kidneys, or to apply the appropriate remedies, which, for the most part, rest upon chemical principles for their efficacy.

"But it is not only physiology and pathology that are indebted to chemistry. The department of Materia Medica, also, is under great obligations to it. Here we find a great number of remedies which are the products of the laboratory. To prove this, it is only necessary to remind you of the long catalogue of acids, alkalies and salts, furnished by chemistry to the Materia Medica, and to allude to the inestimable value of the native organic alkalies, extracted from some of our most important vegetable remedies. Of these, I need merely name to you quina and morphia, to call up the recollection of disease arrested as if by a charm, of pain assuaged, and of valuable lives, under the blessing of Providence, snatched from impending death.

"The importance of chemistry as a means of detecting adulterations is so obvious, as scarcely to need enforcement by argument. Let it not be said, however, that, important as this knowledge may be, its possession is valuable only to the apothecary. For, if it be essential that a workman should be able to judge of his tools; how much more important must it be to the physician to possess the necessary knowledge to determine the quality of his medicines, so as to assure himself of their uniform strength, and freedom from injurious impurity.

"Chemistry is connected with one branch of medical jurisprudence; namely, that of searching for deleterious agents in cases of suspected poisoning. Here the chemist comes to our aid, and, by examining the substance supposed to contain the poison by means of appropriate reagents, determines the question with an accuracy and certainty which are truly surprising. To perform these delicate researches, medical practitioners, in this country, are generally called on; and, unless they possess a knowledge of the chemical qualities of the more important poisons, they cannot conduct the necessary examinations, or give the requisite evidence in a court of justice.

"I have thus, gentlemen, presented to you a sketch of the more important applications of chemistry to medicine. I trust I have made out a case, and convinced you of the intimate connection between the two sciences; a connection which cannot be disregarded even by the routine practitioner, much less by the scientific physician."

The lecture of Professor Bache was the first of the series in which he is at present so successfully engaged as a Professor in the Jefferson Medical College, and the same may be said of the

Lecture of Professor Meigs, who commences with a brief allusion to the pretensions, by which he hopes to gain a share of the confidence of his students as a teacher. In treating of his own career, he thus alludes to the teachers under whom he studied his profession, after having paid a feeling tribute to the gentleman, Dr. Fendall, of Augusta, Georgia, under whom he passed his early pupilage.

"In the course of prosecuting my medical studies I had the happiness, gentlemen, to hear the last course of lectures delivered by the American Sydenham. Why the American Sydenham?—one greater than Sydenham—I mean the late Benjamin Rush; of whom it may be said with truth, that he was *medicorum Americanorum omnium, facile facile princeps.*

"The eloquent accents of that venerable man seem to fall upon my ears even now, when I turn back my thoughts to those young days filled with aspiring hopes and fond anticipations of success and professional distinction. I see him now, surrounded by 500 young men, my fellow students and fellow citizens from every part of our wide-spread country, each one gazing intently upon that reverend countenance, wrinkled with age it is true, but still ruddy with temperance, and radiant with the smile which showed how charming is divine philosophy that sat enthroned upon a brow of the rarest benignity and beauty. I see that good old man erect himself in his chair, upon which, on account of his great age, he was accustomed to sit at his lecture. He puts back his glasses on his forehead—he rises from his seat, and leans with his aged hands upon the desk—he looks abroad over the whole mass of faces and says, "gentlemen, *silence!* I rise from my seat for a special object—I desire you all to remember, that upon this day, I stood up before you while endeavouring to impress upon your minds the necessity of opposing the very beginnings of disease—In order that I might pronounce these two words in your ears—OBSTA PRINCIPIIS, OBSTA PRINCIPIIS." Those words sunk ineffaceably into every man's memory—you hear me repeat them at a distance of twenty-nine years; and it was by such methods as this—by some graceful wave of the hand, by some forcible gesture of the body, by some most apposite illustration, that he endeavoured always to impress deep into the plastic material before him, that signet of his intellectual power whose traces are still visible in the mens medica of these United States—which I firmly believe, is extending its nature and kind, as a good leaven that leaveneth the whole lump, beyond the Atlantic wave.

"There, too, I heard the lesson of the fiery Barton. He had a head that seemed chiseled as by a sculptor, so firm and unwavering was it in its resolute expression. He came there scrupulously dressed, and exactly punctual, to pour the rich and fertilising stream of his discourse, while his face often became the express image of his sentiment, as he felt the warm and generous glow of Linnæus' zeal at the prospect or the hope of some new medicinal herb. When he told us of opium,—of its talismanic properties, and its baleful powers, the tears coursed down his sympathetic cheeks and ours, as as he related the history of the immortal Brown, his early friend—his meteoric fame—his shining intelligence—his dark, and dreary, and dismal fall and death. And then he would gather himself up again, to criticise the doctrines of Cullen, and Murray, and many others, and to urge, urge, urge upon us, the results of his own experience in the therapeutic properties of the preparations of lead, or the nature of American medicines; whilst it was a delight and an honour to sit at his feet and listen, as he poured his lay, almost poetical, over the dry and barren fields of the Materia Medica.

"But there was a Gamaliel there at whose feet one might be deemed happy to sit even all the day long.

"Yes, it was a happiness to sit there, and catch the droppings of that rich fountain of precious knowledge—knowledge that man prays for when his friends, his wife, his child, or when he himself lies prostrate under the assault of an imminent death, or an insupportable anguish. That knowledge that then has no limit to its value, which is impayable, and which man can neither beg nor borrow nor buy; which he can only earn. It is like some bright jewel in a deep and darkling mine. There it lies deep, deep, hidden, low, the prize of patient toil and protracted assiduity: a thousand and a thousand strokes of the axe must win the way to that precious gem; tons and tons of useless ore are to be turned aside before you seize it, all radiant as it is, and glowing with its own pure and proper light: but you seize it at last, and wear it on your brow, where it shines broader than a phylactery, more resplendent than Barbaric gems, or pearls of Ormus or of Ind. It is science—it is sagacity—it is judgment—it is charity—it is love to man—of which that priceless jewel is combined. None win it but the worthy. *Palmam qui meruit ferat*, was the motto of that great teacher, for such was the man who wore that precious gem, OUR Gamaliel in that by-gone day.

"Look at that great amphitheatre, crowded to the outermost ring. No stamping of noisy feet indicated the impatience of a crowd for the arrival of a tardy master. No—at the *point* of time he entered the area. He came, with that cold eye, which you could neither bear nor forbear—its light was different from that of common men. He came with that face of pentelic marble—that hair powdered and dressed in the most finished manner—that blue coat with its metal buttons, closed on his breast on account of his delicate health. There he stood silent for a moment. You would as soon think to cheer a statue, or applaud at the marble features of a corpse, as to have raised your voices in praise or blame where Dr. Physick stood. He opened his mouth after a cold salute, and from thence proceeded choice words of wisdom, which we were too anxious to gather up in our garners of note books, to stop for a moment to see what other men were doing, or imagine what they were thinking, for so great was our trust in what he should say, that we received it as a gospel; and truth to speak, no word of folly or frolic did I ever hear proceeding from the lips of that great man, who deemed the business of dealing with men's lives and teaching others to do so, one of such solemn and dreadful import that there was no place in it for glee or laughter; and so he acted, and so he always looked—he lived so, and he died in that belief. Dr. Physick was a very great man, gentlemen: You had an indefeasible tendency to stand uncovered in his presence. There was a spotless purity in his character, so that he walked as in a bright cloud of moral truth and beauty. Apollo, the god of physicians, seemed to have inspired the nobleness of his countenance, and to have imparted somewhat of the *mens divina* to his whole moral constitution. You and I may live long, gentlemen, yea, and our children after us, before so rare a combination of great and admirable qualities shall again conspire to produce the perfect pattern and model of a surgeon and physician.

"But why have I not yet spoken of *him*, the beloved of the class! By what epithets shall I attempt to particularize those singular good qualities, which, by a happy conspiration, united to make up the character of that good old man—the idol, the darling of the classes? Do you not see that powdered head of his, with its well-adjusted locks and queue? Dr. Wistar enters the area, followed by a cloud of witnesses, bowing often, and rubbing his hands, and with a face on which sat a pleased and yet bashful expression—a mixture of emotions which gave it a most peculiar character,—chiefly delightful, however. He came there amidst sounds of greeting, and the wreathed smiles and looks of exchanged congratulations of the superimposed circles. Men witnessed his entrance as they witness the completeness of preparation for some great feast; there was a satisfied feeling already, like that with which a company inhale the rich perfumes and odours of a feast that is set.

"He lifted his hand, and in a very short, quick expression, he said, *Gentlemen!* Henceforth all was still—a profound silence, broken only by the arrival of some tardy student, which was regarded as a wrong done to the whole company, and a rudeness to be visited by frowns, or even more decided marks of disapprobation, particularly if the white-haired teacher should stop in his career to look around the sky-parlours. Ah, gentlemen, those were the halcyon days of medical instruction!—days ever to be remembered. But those good men are gone off the stage of the world. The eloquent voice of Rush is silent where he lies yonder in his grave; and Wistar sleeps among the undistinguished dead of his sect, in that ground to which I followed his remains—one of the vast concourse of his fellow-citizens, treading with mournful steps, and slowly, the way taken by the dead body of a public benefactor. I felt that day—grieved as I was to part forever with one who had gained my whole esteem and reverence—that I was honoured in being a physician, for my profession was exalted and honoured in his life, and by the public testimonials to his worth and many virtues rendered at his death.

"There, too,—and why not place him in the front rank of the men of that age?—there, too, was the beautiful Dorsey, with a face as bright as the morning, and open as noon-day. An ambition of the highest reach urged him onward in a career that was nobly run, and would have carried off the highest prize, had he been spared to the country. Conquering by the most arduous struggles certain natural impediments of his elocution, he had just attained the perfect victory. He had just stepped on a lofty stage of action, when the angel of death struck him down too, that he might, though young, belong to that great age of American medicine. He came not down to our times, but was gathered to his brethren and his like. He sleeps here among them. The American Sir Astley, is a title which he deserved, not more by the graces of a most ornate mind and manners, than by the great surgical skill and renown which he so early vindicated to himself.

"But I have not spoken of my good friend, Dr. James—Thomas Chalkley James, Professor of Midwifery in that day—a member of the Society of Friends,—a *good man*. There are many persons here, I suppose, who remember the quiet, calm, gentle, modest style with which he came out into the rotunda to meet us in the afternoons. He brought there written lectures filled with learning, ransacked from the whole stores of that time, and arrayed for us into an order and a show that made them always delightful,—garnished, as they were, with apposite classical citations, whether from the ancient or modern authors. He brought, too, the results of a great experience in practice. He brought there, also, his modesty, which never left him from his earliest youth, and which frequently sent the mantling blood over cheeks and brow to testify that he had the deepest sense of the delicacy of the task assigned to him—that of exposing to hundreds of young men, those trembling secrets of the lying-in chamber, which he had blushed to learn, and which he more readily blushed to tell. Take him all-in-all, and you shall search long and far before you shall find a more honourable, upright gentlemen—a riper scholar—a better teacher, or a better man.

"Such were the days, and such the men, when I studied medicine here, near thirty years ago, in the venerable University of Pennsylvania." p. 8.

In the course of his lecture, Professor Meigs well describes the difficulties and responsibilities that beset the practitioner of the important department over which he presides in the Jefferson Medical College; but, at the same time, holds out ample encouragement to the student, who determines to make himself master of the subject, and to practise it understandingly.

Of the *lecture of Professor Dunglison* we can obviously speak only in relation to its objects, not of the mode in which it is executed. As it devolved upon him to introduce his new colleagues, he necessarily speaks of the organisation of the school; and of its prospects; and it may be added, that the increased number of students, now in attendance, have proved the correctness of his favourable anticipations. The catalogue of students will show a considerable addition—and this notwithstanding the death of one colleague during the last session, and the tranference of the services of two others to the new university at New York. How high then must be the prospects of the school for the future, and especially when the unusual number of first course students is borne in mind, all of whom will probably return to its halls! Last year, the catalogue of students contained the names of 163. This year it will not fall much, if any, short of 200.

We extract from Professor Dunglison's lecture the following description of the present condition of medical science, compared with that which it presented at no distant period.

"It has always been a pleasing topic with me, and it is germane to the subject of this discourse to advert to a few (and our time will admit of a few only) of the improvements that so eminently distinguish the middle or an approach to the middle of the present century, from the same period, and even from the termination of the last.

"Commencing with *anatomy*, which is the basis, but only the basis of the other departments of the science, we find it, instead of being limited to a knowledge of the organs exhibited on dissection, as it was in those days, now embracing an acquaintance with the absolute and relative situation of the various organs, or what has been termed *Surgical* or *Topographical*

Anatomy; depicting the relations which the parts bear to surgery and pathology; unravelling their intimate texture and arrangement, their correlations, the origin and formation of the human body, the character of its numerous constituents, and the changes that supervene in the different stages of existence—constituting what has been termed *General Anatomy;* and investigating the relative importance of organs; their presence or absence in the animal series; and from such investigation establishing great general analogies and fundamental laws, that may be applicable to all,—or what has been termed *Philosophical or Transcendental Anatomy.*

"The doctrines of Histogeny, or of the mode in which the tissues are formed, even from the cytoblast or 'germinal cell,' have been a subject of interesting study with the more recent anatomists; and the works, that are now issued from the press on this subject, show a degree of enlightened microscopic research unknown except in very recent periods. The first part of the Elements of Physiology of Wagner exhibits a depth of investigation on this subject, and on the development of the new being, which cannot but astonish those who are unacquainted with the profound labours of modern embryologists. These, however, will form subjects of contemplation for you hereafter.

"Of comparatively recent origin, too, is *Pathological Anatomy*, one of the greatest aids to diagnosis or to the knowledge of disease, but still an aid only; forming, indeed, but a link in the chain of evidence, and very often exhibiting to us the result, rather than the nature, of the diseased action; yet worthy of all attention from him who would desire to know his profession in the manner in which it ought to be known.

"When we pass from Anatomy to *Physiology,* how manifest are the changes that have occurred in the period we have chosen for our survey! Fifty or a hundred years ago, although a bright light was here and there apparent, they were few and far between, and served but little more than to render the darkness visible. Formerly, *dead anatomy* was esteemed the sole foundation of medical study. Since the time of Haller, a knowledge of the *living body*—the *Anatome animata* of that illustrious physiologist, physician, poet, philosopher and mathematician, for he was all—has been added as an essential prerequisite; and no one now pretends to comprehend the laws and phenomena of disease, until he has endeavoured to fathom the laws and phenomena of life. It is obvious, indeed, that before an altered condition of the organs and tissues can be understood, we must be familiar with the healthy condition that preceded it. Physiology is a modern science. The medical press teems with new productions of value. Germany led the way; France followed in her footsteps; and the nations of the Anglo Saxon race succeeded; all vieing with each other for the advancement of this important branch of the science.

"We hear no longer of such questions as were propounded by the learned Sir Thomas Browne, whether, for example, a woman could be impregnated by bathing in the water that had been used by a man a short time previously; and if we occasionally meet with instances like those afforded by such men as Richerand—the most fanciful, by the way, of all modern physiologists—who considers that the reason why the languages of northern Europe contain more consonants than those of the south, is, that the mouth may not be too widely opened, and thus the cold air be prevented from getting, in too large quantities, into the stomach,—we mark them down as mere individualisms, which have no influence on the steady forward course of the science.

"*Surgery* has proceeded onwards in the career of improvement. Operations have been devised within the last fifty years, which must be the source of admiration to the mere philanthropist. Within the last few years, she seems to have had her era of signal inventions, if they may be so termed. The operation of crushing the stone in the bladder, and that for the division of tendons in cases of deformity, would of themselves signalise the period at which they were introduced.

"It is strange, gentlemen, that the latter operation had not attracted extensively the attention of surgeons until deep in the second quarter of the nineteenth century. Of old, a dread was entertained of dividing all fibrous structures, and it was considered hazardous to incise the bladder in cases of lithotomy: that dread soon passed away; yet apprehension, until within the last few years, appears to have been entertained of serious inconvenience from the division of tendons. It is now shown to be a harmless operation. The results have, indeed, been triumphant; deformities of the most distressing character have been rectified, and much mental misery has been removed. Yet the enlightened and humane surgeon is not led to operate more frequently than formerly, or to make constant theatrical displays of his dexterity, with the view of obtaining fame to himself. One of the most important improvements in modern times has been the conviction, that mutilation is often unnecessary, where, in former periods, recourse to the knife would have been regarded as indispensable. Since the introduction of rail-roads, a new form of accident has become common, and has greatly augmented the necessity for amputation: yet this is never had recourse to unless, after full and mature deliberation, all attempts to save the limb are considered fruitless. The skilful and benevolent surgeon has more gratification in saving a single limb that has been doomed to the knife, than in his most brilliant operations.

"As a branch of surgery, and likewise of medicine; *Obstetrics* has kept pace with the parent stems; the practical part has been simplified in its means and appliances; and the treatment of the pregnant and parturient female has been so much improved, both in the way of hygiène and therapeutics, that the value of life has been surprisingly increased amongst the most interesting part of creation.

"*Chemistry* has experienced such changes in the interval I have selected as to exhibit scarcely any of its former characters. Its nomenclature, although necessarily unfixed in consequence of the improved and improving acquaintance with the constitution of chemical compounds, has wrought an important change in the science; and its followers are daily adding to the rich stock of facts and principles which it possesses. It is an interesting and important department of medical study, and merits your close attention. We are every day looking more and more to Chemistry to explain certain physiological and pathological phenomena in our own bodies. Without it, indeed, we could not readily account for several pathological aberrations,—the depositions that take place from the urine, for example, with the appropriate methods for preventing them. The action of antacids in obviating acidity of the stomach, and of disinfectants in destroying contagious and other miasmata or effluvia, look likewise for their elucidation to Chemistry. The whole subject of Toxicology, in its relation to tests and antidotes, belongs to Chemistry; and, in modern times, we are indebted to it for most valued gifts to Therapeutics, which infuse certainty into our prescriptions in some cases, and in others furnish us with articles adapted for the better combating of disease. I need but specify the active principles of the bark, of opium, and of the nux vomica; and the simple body—iodine—which we administer with so much success in many diseases.

"Our *Materia Medica*, or catalogue of therapeutical agents, has received rich acquisitions in modern times. It has gained some energetic articles, and it has lost some of the more inert. It can still spare many that are retained on insufficient titles, and the day must come when it will be greatly reduced. Already the testimony adduced in favour of many of the agents is admitted to be slender and fallacious: yet we are loth to discard them, and they hold their place in consequence of their former reputation.

"A comparison of the excellent Dispensatory of my friends, Professors Wood and Bache, with that of Quincy, so long the standard, will exhibit the signal difference between the condition of Pharmacology now, and at a former period; and I trust, that the revised Pharmacopœia of the United States, assigned to the same able hands, with the assistance of the Colleges of Pharmacy of this city and elsewhere, and any feeble aid that I may be able to render, will be an additional evidence of the advanced condition of the same important department of medical science among us.

"Lastly; the department of *Medical Practice*—hygienical and therapeutical—if not signalised by any extraordinary discovery, has proceeded steadily onwards; and although we may have difficulty in tracing its progress from year to year, the change between the middle of the last century and the present period is great and impressive. It is not easy for us to prove statistically the improvement that has taken place in our mode of treating disease; yet it has been striking. By the assistance of pathological anatomy —by the introduction of auscultation, and the other physical signs, for which the name of Laënnec will flourish illustriously in the annals of our science —and by the better system of observation, and of tracing effects to their causes, that now prevails—we are enabled to diagnosticate disease with greater certainty, and, knowing the disease, to adapt our therapeutical agents accordingly.

"It would be impracticable for me, in the course of this lecture, to bring forward instances in proof of this position, which will be ably and amply confirmed by every lecture of my friend and colleague, the Professor of the Theory and Practice of Medicine. Could one of the worthies of our profession, who flourished in the middle of the last century, be permitted to revisit the earth, how strange would everything appear around him! Although, like the venerable patriarchs of all ages, he might sigh for 'the good old times,' and doubt that all the changes were improvements, he would find it necessary to renounce his ancient ideas, or consent to be honoured merely as a Rip Van Winkle relic of antiquity, in the very place in which he had been formerly looked upon as an oracle." p. 22.

We have received two other introductory lectures—one from Professor Bartlett, of Transylvania University, and another from Professor Hamilton, of Geneva College, N. Y. Both of them are very creditable to their authors. That of Professor Bartlett exhibits considerable thought, usually in the right direction, and generally well expressed. The author is a strong supporter of the school of observation, as all must be: but he overrates, we think, the acquisitions to the science from the labours of its disciples. Observers have always existed, and in all ages have been pertinaciously wedded to the results of their experience; and if we examine philosophically the records of the past—and we would not entirely discard those of the present day—we find, that the science has suffered more from observations, as they have been termed, or facts, than from theories, idle as these have often been. The following extract from Dr. Bartlett, which renders merited credit to the zeal of several of the younger members of the profession in this country, refers to solutions by them of problems, which are still disputed; many of the modern British writers by no means admitting the conclusions as applicable to their own fevers, that have been drawn from the observation of a few of them on this side of the Atlantic.

"I wish to remark further, that there has never been a time when we had as good cause for self-congratulation as we now have. In the course of this lecture I have expressed myself freely respecting the short comings and the vices of medical philosophy, and the disastrous results of these upon practical medicine. I have done this from an honest conviction of its truth, and from a strong feeling that in no other way could I do as much service to you.

"Not less strong than this feeling in regard to the errors of the past, and even of the present, is my conviction of the certain progress and improvement of medicine. The prospect of the future, which presents itself to my contemplation, has more in it of vision than of faith. I have an undoubting confidence, resting alike on the experience of the past and on the essential nature of things, that our science and art are destined to go on in a course of great and almost indefinite advancement. Never before, within the same period of time, during the existence of the science, has it made such rapid and sure progress as for the last forty years. Within the last twenty years, especially, have the best minds in the profession been devoting themselves, with a singleness of purpose, with a patient industry, with an untiring zeal, and with a lofty and disinterested love of truth, before unequalled—before unknown—to a thorough, comprehensive study of disease. Never before has such searching inquisition been made into the phenomena and relations of morbid action; and never before with such triumphant results.

"Every where the time is full of the brightest promise, and especially so is it here. Some of the most common, the most violent, and of course the most important and interesting forms of disease, as they occur in and are modified by our own climate and position, are yet to be fully studied and compared with their cognate and analogous forms abroad. And this can only be done in the spirit of that philosophy, which it has been the object of this lecture to define. Guided by this philosophy, I cannot conceive a richer field than that which is spread out before the American Physician. Already have there entered upon it ardent and active labourers, not a few, thoroughly furnished to their work. They are taking possession of its treasures:—they are writing their names on its history:—they are gathering garlands for their temples, which shall never wither away. Already have some of our young men, even, solved important problems in pathology, which had foiled the skill, and eluded the dexterity of our British brethren.[1] Happy and fully satisfied shall I be, if I can, even in the slightest degree, be instrumental, in preparing you, either by infusing into your minds the right spirit, or furnishing means to enable you to go forth and occupy, worthily, the rich inheritance which awaits you.

"As in the direction of all our other relationships—social, moral, economical—the future opens itself before us in *two* paths, so does it here. One of them, the great and common highway of *False Philosophy*, is broad, well trodden, and shows itself fair to the eye, *at its entrance*. Flowers blossom along its borders: syren voices sing the safety and the delights of its course—the beauty of the scenery through which it runs, and the grandeur of the Temple of Truth to which it leads. Multitudes have thus been led, and multitudes are still led to enter upon this enchanted ground. But the pathway, so pleasant at its beginning, soon loses itself in uncertain wanderings, and in a constantly thickening obscurity. The melody of the morning outset is soon changed to dissonance. Discordant and jarring voices, issuing from the thousand and one belligerent and angry schools, into which the travellers are divided, make an utter Babel of the place. Every leader of every sect proclaims his own little rush light—kindled at the lantern of some will-o'-the-wisp—and glimmering feebly in the fog—to be the true sun of the medical world; and his own crooked and misty path of the confused labyrinth, in whose mazes of cloud and quagmire they all wander, to be the only sure and safe road to the truth.

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[1] Dr. **Gerhard**, of Philadelphia, was the first to point out the difference, both in symptoms and pathology, between the true British typhus, and the common continued typhoid fever of the United States. In the whole range of practical medicine, there is no single circumstance, which, both to the British and American practitioner, has been the occasion of so much obscurity and confusion, as the confounding of these two diseases, resembling each other in many respects, but still differing from each other, as clearly and as distinctly as measles and scarlatina.

"The other is the pathway of *True Philosophy*—in our own science, as in all the rest—narrow and rugged at its entrance, dimly lighted, it may be, and filled with obstacles which it is difficult to surmount. But nevertheless, fear not, and be wise in your choice. This pathway shall widen as you proceed, and every successive step, in your onward and upward career, shall be surer and easier than the last. The light shall brighten as you go on, the earth shall grow firmer under your feet, the heavens shall spread bluer and broader over your heads. The horizon shall widen around you, and every hour shall bring within the scope of your vision objects of new and boundless interest. You will find yourselves, too, in a small, perhaps, but a glorious company, led on, in the far distance, with his flowing beard, and his venerable form, by the old Physician of Cos. It is the path which was trodden by the Sydenhams, the Hallers, the Hunters, the Bichats. It is the path which led Harvey to the most brilliant achievement in the annals of physiological science. It is the path which led the more fortunate Jenner to that discovery, which has embalmed his name in the gratitude and the love of countries, and of all times. It is the path which led Newton—*clarum et venerabile nomen*—up, up, to that loftiest pinnacle ever reached by uninspired humanity, crowned with light of ineffable brightness, where the veil, which, from the creation of the world, had hung before the universe, hiding its wonder and its mystery, was rent, and man was suffered to look, for the first time, out upon the beauty, the majesty, the unchangeable order, of the handiwork of God. Into this path, and not into the other, be it our effort and our happiness to enter!"

We have not space to say more than that the introductory lecture of Professor Hamilton contains excellent advice to his young hearers.

MISCELLANEOUS NOTICE.

[We cheerfully comply with the request of Dr. Carpenter in inserting and procuring the insertion of the enclosed correspondence. The request of an aggrieved professional brother, and of one whose reputation is so much connected with the cause of true science, is to us in the light of a command. Dr. Carpenter has been charged with the sins of another. It is but right that all should aid in the disssemination of his assertions of innocence.]

Copy of a Letter from Dr. W. B. Carpenter *of Bristol (England,) to Professor* Dunglison *of Philadelphia, in reference to certain charges made against the former, by Dr.* Martin Paine, *Professor of the Institutes of Medicine in the University of New York, in his "Examination of Reviews, &c."*

Bristol, Nov. 16, 1841.

My Dear Sir,—Having just received from Dr. Paine a copy of his "Examination" of the Critique on his Medical and Physiological Commentaries, which appeared in the April Number of the British and Foreign Medical Review, I find, to my great surprise, that Dr. P. has thought himself justified,—not only in singling *me* out as the Author of it, and in animadverting upon what he considers to be *its* misrepresentations, as if they were *mine* (thereby attempting to make that a matter of personal discussion between us, for which the Editor of the Review holds himself responsible,)—but also in fixing upon me a charge of literary plagiarism, which is calculated, if I allow it to remain uncontradicted, to do great injury to my personal as well as to my scientific character.

Before going further, I must express my astonishment that any person holding the position which Dr. Paine occupies, should commit himself to so grave a charge against an individual, to whose discredit he *knows* nothing, upon evidence so flimsy as that which he adduces;—especially as he must have been aware that, from the distance of the accused party, his defence could not be laid before the public, until many months should have elapsed since its publication, during which time, an injurious, impression would have been formed not easily to be eradicated. And I think that I have further a just right to complain, that Dr. Paine's inculpation of me is not confined to surmise; but that, after he has proved his point to his own satisfaction, he has taken it for granted, and, throughout the latter part of his pamphlet, has continually coupled my name with the accusation of gross plagiary.

The evidence which Dr. P. adduces in support of the charge, is briefly the following:—Having made up his mind, from certain coincidences of opinion and of expression, between the Critique on his Commentaries, and my Principles of Physiology, that I must be the writer of the former, he has searched in previous numbers of the same Review for articles written, as he imagines, by the same author. In this search he thinks himself assisted by references occasionally made from one article to another,—the complete fallacy of which kind of evidence is exposed in Dr. Forbes's letter. Upon the same evidence, I must have been the Reviewer of my own work; and I am not certain, whether Dr. P. does not mean to insinuate as much.—Any person, however, who carefully reads that Review, which I did not see until it was in print, may find abundant evidence of the absurdity of such an idea. With respect to the other chief source of Dr. P.'s evidence,—coincidence in opinion, and in the mode of expressing it,—I will only say that Dr. P. shows great ignorance of the state of physiological science in this country, if he imagines that the opinions expressed in my Principles, on the subjects alluded to, are at all peculiar to myself; and it is very natural that one writer should almost unconsciously adopt the phraseology of another who has recently treated of the same questions, when desiring to express the same ideas.

So much for the evidence on which Dr. P.'s charge is founded. I have thus examined it, merely to show how unjustifiable it was in Dr. P. to charge me with the perpetration of a gross literary theft, upon no better grounds. The charge itself,—that in a review of Hunter on the Blood, in a former volume of the same Journal, I unceremoniously adapted certain passages from Dr. Channing's Essay on Milton, to a very different purpose,—is easily disposed of. *I did not write that review.* To those who know me, my simple denial would, I am confident, be amply sufficient; but for the satisfaction of Dr. Paine, who, in his ignorance of my character, may think me as capable of asserting a falsehood, as of stealing a paragraph, I enclose a note from Dr. Forbes confirmatory of my assertion.

Dr. Paine considers that his identification of me with the plagiarist is triumphantly confirmed, by a correspondence which he imagines that he has detected, between certain passages in my Principles of Physiology, and others which he has selected from Dr. Channing's Sermons. I am myself completely at a loss to discover this correspondence; and my friends here find it equally difficult. The falsity of this charge is as easily proved as that of the other; for *I have never* (I speak it almost with shame) *read the Sermons* from which Dr. P. quotes. The ideas which I have expressed, have so long been familiar to my mind, that I cannot imagine that they involve anything peculiarly *Channing-ian.* If any correspondence do exist, it is easily accounted for by the fact, that I received my education from one, who was for many years the respected and attached friend of that illustrious man, and whose mind, cast in the same mould with his, impressed mine with those habits of thought, which have led to whatever similarity may present itself between our published opinions.

In regard to Dr. Paine's criticisms upon the scientific opinions I have expressed in my Principles of Physiology, I shall not now offer any remarks; nor do I intend to take up the gauntlet from an opponent, who has shown himself so destitute of judgment and of good feeling. Of the merits of our respective productions I am quite content to leave the public to judge.

Having few means of placing my statement before the Medical Public of America, save through your mediation, I take the liberty of so far trespassing on your kindness, as to request you to gain insertion for it in such Journals, as may give it a circulation equal to that of Dr. Paine's calumnious charges against me.

Believe me to remain, Dear Sir,
Respectfully and sincerely yours,
WILLIAM B. CARPENTER.

From Dr. FORBES, *Editor of the British and Foreign Medical Review, to Dr.* W. B. CARPENTER.

Dear Carpenter,—As I think it would be a piece of silliness, only second to that of writing and publishing the "Examination," to attempt any detailed or serious reply to Dr. Paine's wordy reclamation, or any justification of the article in the Review to which it refers,—I shall take no notice whatever of his attack, further than relates to the charge of plagiarism. *This is true*, so far as the writer of the review on Hunter is concerned, but *false* as concerns *you*,—since you did not write that review. This I am ready to state to all persons, at all times, as the truth, without any reservation or equivocation. The conduct of the writer of that review, in palming upon the Editor a portion of the writings of another for his own,—if really done intentionally and with a view to deceive (I would fain hope that the fact may admit of some other interpretation,) cannot be sufficiently reprobated. Although, as being the first specimen I had had of this person's writing (and, with one trifling exception, the only one I have ever had) I might be forgiven for not suspecting the authenticity of the surreptitious passages, I take shame to myself for being so little acquainted with the eloquent writings of Dr. Channing, as not to detect the theft before the MS. left my hands for the press.

Perhaps when Dr. Paine discovers that he is mistaken in the affiliation of this portion of the Review, he may feel somewhat less confident of the evidence by which he thinks he has traced the authorship of other articles in it to you. I certainly shall not gratify his curiosity on this point, by either affirming or denying the accuracy of his conclusions; and I do not see any reason why you should.

It is singular that Dr. Paine should have been so ignorant of the ordinary mode of conducting a Review, as not to know that the reference from one article to another is no proof whatever of the identity of the authorship of the two,—even when this reference is made by the writer of the latter article. But, most commonly, such references are made by the Editor, without any communication with the original writer, in the exercise of the privileges inherent in the office of the great editorial WE.

In looking at the vast accumulation of words in Dr. Paine's pamphlet, I confess that I feel regret that the review of his book (just and accurate as I still hold it to be) was not more favourable; as it is melancholy to think that so much time and pains should have been stolen from tasks of usefulness, and expended in elaborating a work, which, of course, no human being will read, except the author himself, perhaps the writer of the inculpated article, and, alas, the Editor of the Review.

It is lamentable to see how this mortification of Dr. Paine's self-love has clouded his judgment throughout the whole composition of his pamphlet; and this obfuscation is nowhere more conspicuous, than where he attempts to convict you of plagiarising, in your "Principles of Physiology," from Dr. Channing. The very examples he adduces confute the charge.

Believe me, Dear Carpenter, to be most truly yours,
JOHN FORBES.

OLD BURLINGTON STREET, Nov. 15, 1841.

THE

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Art. I.—ABUSE OF CATHARTICS IN COLIC.

By S. A. Cook, M. D., of Buskirk's Bridge, N. Y.

Dr. Gooch informs us that he "remembers when a boy reading a story of two knights-errant, who arrived on the opposite side of a pedestal surmounted by a shield; one declared it was gold, the other that it was silver: growing angry they proceeded to blows, and after a long fight, each was thrown on the opposite side of the shield to that where he began the fight; when both immediately detected their error: the knight who had said it was silver finding that on the opposite side it was gold; and the knight who said it was gold finding that on the opposite side it was silver." I cannot, however, subscribe to the sentiment that "this story presents a good illustration of the state of medical opinion in this age—perhaps in all ages," as such an acknowledgement amounts to nothing more or less than a concession that medicine has no facts—is a mass of baseless and contradictory theories. Medical science is a progressive science, and hence arises necessarily something of a variety in medical opinion; yet generally it is only a difference in progress; a circumstance which has its origin, not only in the state of the science in different ages, but in the extent of its cultivation by different individuals in the same age. Hence it is a consistent conclusion, and one founded on the evidence of all experience, that however well the nature and treatment of any variety of disease may now be understood, there exists a probability that future observation may throw still more light upon it;—a consideration presenting an ample field for enquiry to such as pursue the profession with a laudable ambition for its improvement.

I am desirous of calling the attention of medical men to the ordinary, or at least the too frequent, treatment of colic by active purgatives, believing that however favourable such a plan may occasionally operate, it is founded on an erroneous conception of the nature of the disease: and that it not only frequently fails of success, but is often injurious to the patient where a more judicious practice would be entirely successful. To illustrate my meaning, I shall present sketches of the history of several cases that have fallen under my observation, not doubting that the experience of almost every practitioner furnishes similar instances.

Case I.—Feb. 1834. I was called to a gentleman about 10 A. M., suffering severely with colic. He informed me that he had lately recovered from remittent fever, that his appetite had been somewhat sharp, though he supposed he had not eaten more than he usually did in a state of health, yet he remarked that he had taken his dinner the day before with an excellent relish; and that while riding during the afternoon he had felt occasional pains in the bowels, which became severe in the evening, when he took a small dose of castor oil, which operated sparingly about 11 P. M., with a slight temporary relief. His physician, who had been with him since about midnight, had bled him, applied fomentations, given active cathartic doses of calomel and jalap, administered a variety of enemas; notwithstanding which the pain had increased in severity, the pulse in frequency, the abdomen had become tender, and no fæcal discharges had been obtained. In this state of the case, I recommended a farther use of the lancet, the warm bath, a combination of castor oil and oil of turpentine to be repeated *pro re natâ*, and a continuation of the enemas. The warm bath afforded temporary relief; yet the disease continued, and as the patient was an eminent divine,[1] and among strangers, other physicians were called and stronger measures resorted to: the lancet continued to be plied, croton oil in large doses by the mouth and *per anum* repeated, until, about forty hours from the attack, the bowels were moved freely, but without relief: the patient died fifty-four hours after the commencement of the disease.

Case II.—G. G., a farmer, aged 36, generally of robust health, (had an attack of colic June, 1837, from which, after several days of severe suffering he recovered through the instrumentality of the lancet, active cathartics and enemas, some of which were sent *per* tube into the colon *à la O'Bierne*) was taken with colic, January 1, 1839. I first saw him on the evening of the 5th. Up to this morning he has directed his own treatment. During this time he has taken thirteen empirical cathartic pills, seven ounces of castor oil, about the same quantity of sulph. magnesiæ, and to day, by the direction of a physician who saw him this morning, a large dose of calomel and jalap, endeavouring during the whole time to assist the operation of these various remedies, by enemas. He has had constant tenesmus, voiding small quantities of morbid mucus, during the last two days, and his bloated and tender abdomen presents evidence of extensive abdominal inflammation. The treatment to which I resorted, was as free a use of the lancet as the constitution of the patient and the stage of the disease would permit, united to a liberal employment of calomel and opium; and though this treatment was, within twelve hours, followed by free fæcal discharges and relief of the pain, yet he sank into a state of collapse and died on the morning of the 12th. The *post mortum* appearances were those of extensive inflammation of the large and small intestines with numerous gangrenous spots near their union.

Case III.—Called to Miss H. F., 16th March, 1840, aged 16 years, from her attending physician obtained the following history, "She was taken a week ago this evening, with acute pain in the region of the ascending colon, near the top of the right ileum. Saw her first about twenty-four hours after the attack and immediately bled, when the pain subsided. I now undertook to evacuate the bowels, which was found very difficult, and was only effected by administering active purgatives and enemas during forty-eight hours, when diarrhœa supervened without pain, but attended with great restlessness, and which continued till last evening, notwithstanding mild astringents, as marsh rosemary, &c., in conjunction with *pulv. Ipec. comp.* were used. Last evening, the diarrhœa suddenly ceased, followed by acute pain in the region of the pyloric orifice of the stomach. The temperature of the skin, which has at no time been much, if any, above the healthy standard, at this time sank considerably below it," and it is to day cold and damp, the patient being in a stage of collapse, in which she continued about five days and died.

The above cases are but cursorily sketched from notes taken at the time, in order to call the attention of the reader to a single point, *viz.* the frequent consequences of a treatment based upon a supposed necessity of evacuating the alimentary canal, as a primary indication in colic. Before enquiring how far such a necessity exists, or what plan of treatment promises the most successful issue in this fearful disease, it may not be improper to examine how far that adopted in the cases already related is in conformity with the opinions and directions of our elementary writers. I shall quote indiscriminately. "The bowels have their discharges interrupted by spasmodic constrictions, denominated colic. Without engaging in the enquiry, relative to the varieties of this disease, I shall state that in all such cases, cathartics are indispensable. Being customary, here, to direct the more active articles, it is important to know that in some instances, the most lenient are to be preferred. There is a certain relation between the power of a medicine and the tone of the system, which seems sometimes to be graduated with extreme nicety and precision. What operates at one time, we find inert at another, under apparently similar circumstances, and in the same person. This is owing to a want of harmony in the case."[1]

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[1] Rev. Cowles Carpenter of the Methodist Episcopal Church.

Dr. Mackintosh on this subject says "It is a most essential point to obtain free evacuations from the bowels speedily, particularly by means of injections; certainly the best is composed of tobacco, in the proportion of half a dram infused, for ten or fifteen minutes, in eight or ten ounces of boiling water, to be strained and exhibited when sufficiently cool." * * * "The advantage of opium is very doubtful till the bowels have been properly moved and the evacuations examined."[2]

Dr. Gregory, in treating of bilious colic, recommends, where full vomiting has not taken place, an emetic of ten or fifteen grains of ipecacuanha, "which may be followed by a pill containing calomel and rhubarb, a dose of castor oil, or the common senna draught. If there be much irritability of the stomach it is better to commence with a saline draught in a state of effervescence, containing a few drops of laudanum. This will enable the practitioner to administer the aperient medicine subsequently with more advantage. When the operation of purgatives on the bowels is manifest by the appearance and odour of the evacuations, a full dose of laudanum may be given with the happiest effects." Dr. Gregory cautions practitioners against the use of opium until the bowels be evacuated, asserting that "experience will show that though it will afford relief in the first instance, its exhibition is in most cases succeeded by increased feverishness, and an aggravation of headache, and uneasiness of the bowels. In the treatment of bilious colic, the object is to free the bowels from the load which oppresses them."[3]

Dr. Colhoun in a running note to the above, adds—"Active enemata, of turpentine rubbed up with the yolk of an egg, of salt and water, the tobacco suppository made by rolling up some wet tobacco leaves, and sewing them together in a proper form, will be useful in assisting the operation of purgatives according to the judgment of the practitioner."

Dr. Eberle advises, that "when the pain is confined to the bowels, occupying the colon, an active purgative in union with aromatics, or with some of the more volatile anti-spasmodics, ought to be given; and purgative enemata administered at short intervals, until the bowels are freely moved. Castor oil, with spirits of turpentine is an excellent purgative in colic from the irritation of acrid substances, or imperfectly digested articles of food lodged in the bowels. I have often employed this mixture with prompt and complete success. *In some instances, however, the sufferings of the patient are so extremely great, that we cannot wait for the operation of a cathartic to procure relief. In such cases, almost the only remedy, on which any reliance can be placed, is opium given in large doses.* From two to three grains should be given at once, or what is better an equivalent dose of laudanum; this will always procure relief in forty or fifty minutes;

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[1] Chapman's Elem. of Therap. 5 edit. vol. i. p. 203.

[2] Mackintosh's Principles of Pathology and Practice, p. 179.

[3] Gregory's Elements of Theory and Practice, 2d. Amer. edit. vol. ii, p. 324.

and in many instances of this severe character, nothing but this remedy in enormous doses will allay the extreme agony of the patient. *The opium, when given in large doses in this affection, does not materially impede the subsequent operation of cathartics*, and the administration of a purgative should never be neglected, as soon as the violence of the disease is moderated."[1]

The early evacuation of the intestinal canal is made the primary indication in the treatment of colic by a great majority of our most eminent writers, though something of a variety of sentiment exists with regard to the best means of effecting this object. While some recommend mild aperients in repeated doses, either with or without carminatives, anti-spasmodics, or sedatives; or, where the patient is seen early, while the stomach contains a portion of the offending matter, either in the form of ingesta, or of depraved secretions, that these be preceded by mild emetics; others direct us to proceed at once, and especially in the more violent cases, to the use of the most powerful irritating and depressing of the class of purgatives, either by the mouth or *per anum*. Two drops of croton oil,[2] oil of turpentine combined with castor oil,[3] tobacco injections,[4] and suppositories,[5] &c., means, which if early used, may frequently prove successful, but which, as every practical man must have repeatedly witnessed, are not only often unavailing, but absolutely injurious. Nor is the general feeling among practitioners less favourable to the use of purgatives in this disease, under its various forms of severity: almost all following in the way thus laid out for them, without taking the trouble to observe or think for themselves, consider evacuation of the alimentary canal as the object, and end of all medical treatment.

PATHOLOGY.

A judicious prescription in any disease can only originate in a sound pathology; and as the physician who is called upon to prescribe for colic is required to act promptly, when the extreme agony of the patient, the anxiety of friends, and his own sympathies all tend to confuse his mind, he should have clear and accurate perceptions of the nature of the case before him. The exciting and predisposing causes, the present pathology and the changes to which it tends, the constitution and habits of the patient are all subjects of careful consideration; and a successful termination frequently depends upon the tact with which the predominant symptom (pain) is subdued by such remedies as diminish the existing disposition to progressive change. Few diseases possess more completely what may be termed a transition pathology; and, at whatever period of its progress the case may have come under consideration, we are to look forward to the effects of the present morbid action, as the cause of additional and different phenomena at some future time: and hence the subsidence of a prominent symptom, unless that symptom have been subdued early, is frequently no evidence of improvement, but on the contrary the harbinger of more intense morbid action. To this circumstance may be attributed the often observed circumstance (and one which frequently deceives the friends, and may the physician, if he be not on his guard,) of a sudden cessation of pain, perhaps a free evacuation of the bowels, after they have for many hours resisted the most powerful purgatives; and that too while the disease is still rapidly advancing to a fatal termination.

Without purposing to notice the varieties of colic, which different medical writers[1] have made more or less numerous, and some of which have undoubtedly a real existence in fact, while others probably find only a habitation in the imagination of nosologists, I shall proceed to a brief examination of its pathology.

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[1] Eberle's Practice, 2d edit. vol. ii, p. 323.

[2] Dewees's Practice, p. 798–9.

[3] Eberle, *op. cit.*

[4] Mackintosh op. cit. and Abercrombie.

[5] Colhoun's Notes on Gregory, op. cit.

"There appear to be three morbid conditions of the intestinal canal, which more or less exist in the simplest, as well as in the most severe and complicated forms of colic, and which evidently depend upon depressed vital power of the digestive canal.

"1. Morbidly increased sensibility and irritability of some part, or the whole of the bowels.

"2. Irregular distention and spasmodic constriction of their canal.

"3. More or less copious generation of flatus in their track, occasioning great distention and irregular reaction—the second morbid condition adduced."[2]

1. Of the existence of the first condition, "a morbidly increased sensibility and irritability of some part, or the whole of the bowels," there may or may not be sensible evidences, previous to the developement of the prominent phenomena of the disease, or second morbid condition. There may have been during several days slight headach, a bitter taste in the mouth, eructation of sour or acrid matter from the stomach, trifling pains during digestion; or the individual may be suddenly seized, without any of these premonitory symptoms, with severe colic pains, after eating a hearty meal, and these sensible phenomena might be considered as the first link in the chain of morbid actions, had not his previous history frequently exhibited him indulging in like trespasses with impunity—a fact most reasonably accounted for, by considering the alimentary canal, or some portion of it, as previously suffering from a morbidly increased sensibility, though unrecognised by the mind.

2. The second morbid condition, or "an irregular distention and spasmodic contraction of the alimentary canal," or of some portion of it, constitutes the prominent character of colic, and it is only where this condition is exhibited that the disease can be said to be completely developed. Pain, usually violent in the extreme, sometimes permanent, while at others paroxysmal, a sensation of twisting or irregular contraction about the umbilicus, and more or less obstinate constipation are the most constant features of this stage.

The infrequency of a fatal termination, before inflammation produces structural changes, makes it extremely difficult to determine upon what morbid condition the pain of colic depends. The sensation of twisting and constriction are so evident to the patient, that it is difficult to dismiss the idea of spasm from the mind, while the feeling of fulness, not only recognisable by the patient, but also by the hand of the attendant pressed upon the abdomen, shows that distention of the canal by a secretion or evolution of gas constitutes an important item in the pathology of the disease.

3. Indeed so prominent is this third condition—the copious generation of flatus in the track of the alimentary canal, that a late eminent writer[3] has advanced the opinion that the condition of the parts in a fatal case of "ileus (or colic) consists in a state of simple distention, without any visible change in the structure of the part," and that the doctrine of spasm, as applied to this subject, must be admitted to be entirely gratuitous. He also contends, that the contraction, or collapsed state of certain portions of

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[1] Sauvages presents twenty-two varieties. Cullen seven. Good six. M. Pariset twelve. M. Chomel about the same. Schettman six species, which are divided into several varieties; while Abercrombie includes under the common term ileus, all varieties, considering their difference to depend upon the degree or extent of morbid action.

[2] Copland's Dic. Prac. Med.

[3] John Abercrombie, M. D., Path. and Prac. Res. on Dis. of Stomach, &c.

the canal assuming a cord like appearance, so frequently observed, "appears to be the natural state of healthy intestine when it is empty," that these parts are almost invariably found in a healthy condition at all periods of the disease; the morbid appearances, whether inflammation, lividity, exudation, or gangrene, being almost entirely confined to the distended parts; and Dr. Abercrombie thus sums up his new doctrine of ileus or colic to consist of one of two states, or that the disease arises from one of two classes of proximate causes, viz. 1. "Primary diminution or destruction of the muscular power of a portion of the canal; and 2dly, Impediments to its action, the consequence of which is, that a part, which is at first healthy, becomes impaired under the effects of this interruption." The primary diminution or loss of muscular power of portions of the intestinal tube under certain circumstances cannot I think be questioned. Such a state may arise from inflammation, either originating in the muscular coat or extending to it during the progress of morbid action; the latter circumstance accounting for the frequent attacks of colic in patients suffering from chronic inflammation of portions of the mucous surface of the canal. The diminution or loss of muscular power may arise from the effects of lead producing more or less perfect paralysis of the muscular fibre, as we observe from the same cause in the voluntary muscles. The effects of obstruction we have all witnessed in hernia, or from an accumulation of hardened fæces, yet the practioner will at once conclude that his frequently occurring cases of colic cannot all arise from so limited a catalogue of causes, and as the sensations arising from spasm, where its existence can be observed as in the voluntary muscles, are intense pain, with a peculiar feeling of constriction, he will be likely to infer the existence of the same state where similar sensations arise, though not immediately demonstrable to the sense of sight. Nor can it be expected, that the existence of spasm can be demonstrated after death. Spasm consists in muscular contraction of a morbid character to be sure; yet as contraction is one of the properties peculiar to the living muscular fibre, and cannot exist when life has ceased, we should not expect to find it on dissection, any more than we should expect to find pain, or motion, or any other property peculiar to and dependant on life. Nor does Dr. Abercrombie's thirty-sixth case, though presented as an incontrovertible proof of the truth of his peculiar views, afford any evidence against the existence of spasm. The patient, an aged female, "had, twenty-seven years before her death, suffered from strangulated hernia, which terminated in an artificial anus in the right groin. This continued open for a very considerable time, and then gradually closed," and since about ten years after the closure she has been liable to attacks of colic, one of which, March 16th, 1827, proved fatal. Eighteen hours before death, as a dernier resort, an opening through the cicatrix of the former artifical anus was made into the intestinal canal, sufficiently free to readily admit the finger entirely into the gut, without any discharge of gaseous or fæcal matter, or any relief of the existing symptoms. The feculent matter flowed freely during dissection. Now it appears to me, that if the retention of the contents of the intestine in this case depended on a loss of muscular power, that power could not be restored by death; but if, on the contrary, retained by spasmodic contraction, the obstruction would be removed by death, and would not be discoverable on dissection.

The existence of spasm may also be inferred from analogy. Where other mucous membranes are connected with muscular fibre, either directly as in the case under consideration, or by correlation of functions any, irritation of their surface produces spasm. The just emptied uterus contracts with violence upon the introduced hand—the *orbicularis oculi* upon the grain of sand falling upon the conjunctiva. The muscles surrounding the urethra grasp with spasmodic energy the catheter, and is it "entirely assumed and gratuitous," to suppose that the same consequences follow like irritations of the mucous lining of the alimentary canal.

The essential pathology of simple colic, then, would appear to consist, as has been before stated, in a morbid sensibility of the whole or some portion of the intestinal tube, spasmodic, or other obstruction to the passage of the contents of the bowels, and distention arising from a secretion, or an evolution of gas, often so far extending the muscular fibre as to weaken or even destroy all muscular power in the distended portions of the canal.

To these phenomena giving rise to intense suffering, other states rapidly succeed, viz. inflammation and its consequences, often terminating fatally in various stages of its progress,—presenting on dissection every variety, "from a recent tinge of redness to extensive gangrene."

S. A. COOK.

Buskirk's Bridge, N. Y., January 22, 1842.

For the Medical Intelligencer.

ART. II. SIX CASES OF DIARRHŒA TREATED WITH MONESIA.

BY Q. GIBBON, SALEM, N. J.

CASE 1st.—Mrs. K.—Married. Had laboured under chronic diarrhœa accompanied with ulceration of the intestines for two years. Three or four months ago she was put upon small doses of acet. of morphia, which after several weeks continuance arrested the disease, and the patient remained for two months apparently perfectly well. At the expiration of this time the disease suddenly returned, and soon regained all its former activity. The extract of monesiæ was now commenced in doses of 5 grs. three times a day, and afterwards increased to 7 grs. four times per day, and continued for ten days, but without any other benefit than a slight decrease of the discharge for the first two days. The medicine was then discontinued, and the morphia substituted with its former success.

CASE 2d.—A child of W. H., affected with diarrhœa of 18 months standing, had used anodynes, alteratives and astringents freely, but without permanent benefit. The ext. monesiæ given in doses of two grs., three times per day, assisted by the warm bath and frictions with flannel, checked the discharges in two days, and removed all traces of the disease in two weeks.

CASE 3d.—J. M., aged 70—health delicate, had a diarrhœa, with short intermissions, for six months—had been treated with creta cum hydrarg. with but temporary relief. Took six grs. of monesia four times per day, from the 2d to the 10th of November, assisted by a few grs. of pulv. doveri., occasionally, at bed time. The discharge ceased in two days, and upon the tenth he expressed himself perfectly well.

CASE 4th.—Mrs. J. Diarrhœa of four or five days continuance—slight fever, tormina, stools bloody and slimy. Had resorted to no previous treatment. Took 8 grs. of ext. mones. three times the first day, which checked the discharge, and allayed all unpleasant symptoms.

CASE 5th.—A child of four years of age, affected with a bowel complaint which had commenced in the summer, and continued unchecked until November, though treated with a variety of astringents, and subjected to counter-irritation upon the abdomen. The monesia was given in doses of 2 grs. five times daily for six days, with the effect of gradually diminishing the discharges, changing their colour and consistence, and creating a vigorous appetite, which the child had not previously enjoyed. Having no more of the remedy, I was compelled to relinquish it. Dover's powder and flannel frictions were substituted, and I had the satisfaction of seeing my patient perfectly relieved in another week.

CASE 6. In this case the remedy entirely failed as in the first case. It was one of diarrhœa supervening upon phthisis pulmonalis, and had been previously treated by creta cum opio., acet. of lead., acet. of morphia, and several of the vegetable astringents, without benefit. The monesia was prescribed at first to the amount of 15 grs. and afterwards increased to 40 grs. per day, and persevered in for three weeks—when, as no abatement of the symptoms was perceived, the remedy was discontinued at the request of the patient.

Remarks.—That the above cases may be entitled to their just weight in the evidence now accumulating both for and against this new remedy, it may be well to state, that the few last doses taken by Mrs. K. in the first case, occasioned slight nausea accompanied by a slight burning in the stomach. With this exception, I have not witnessed any of the irritating effects detailed by St. Ange. My doses, however, were not so large as he prescribed. The above cases lead me to infer that monesia is more astringent than tonic in its operation.

Salem, Jan. 6th, 1842.

BIBLIOGRAPHICAL NOTICES.

Dr. E. J. Coxe on Medical Inhalation.[1]

Dr. Coxe's copious title page indicates the objects of this small volume. Dr. Coxe himself has had considerable experience in the use of inhalation in various diseases, and it is needless to say—as he has been led to publish on the subject—that he is favourably impressed with the remedy. He has cited freely from various authorities, many of whom are more worthy of being recorded in the title page than some that are placed there. The directions for the facile employment of the agent are clearly given, so that no difficulty can exist in having recourse to it.

Dunglison's Practice of Medicine.[2]

We can say no more than that this work has just been issued. It comprises *nine books*, respectively treating of, 1. Diseases of the alimentary canal. 2. Diseases of the respiratory organs. 3. Diseases of the circulatory apparatus. 4. Diseases of the glandiform ganglions. 5. Diseases of the glandular organs. 6. Diseases of the nervous system. 7. Diseases of the organs of the senses. 8. Diseases of the organs of reproduction. 9. Diseases involving various organs—as fever and cachexia.

Harris on the Teeth and Gums.[3]

This work is very creditable to Dr. Harris. It is on subjects that ought to receive more attention than they do from the Physician and Surgeon. After some appropriate general considerations, the author describes the physical characteristics of the teeth and gums, of salivary calculus, of the fluids of the mouth, of the lips, and of the tongue.

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[1] A Practical Treatise on Medical Inhalation, with numerous cases demonstrating the curative powers of the local application of various remedies in Bronchitis, Consumption, and other diseases of the respiratory organs, embracing the opinions and experience of Rush, Sir Charles Scudamore, Eberle, Mudge, Crichton, Thomas, Corrigan, Ramadge and others. By Edward Jenner Coxe, M. D. (with a motto) 24 mo. pp. 108. Philad. 1841

[2] The Practice of Medicine, or a Treatise in Special Pathology and Therapeutics. By Robley Dunglison, M. D., Professor of the Institutes of Medicine, &c., in Jefferson Medical College, in two volumes, 8 vo. pp. 572, 750. Philadₐ. 1842.

[3] A Physiological and Pathological Inquiry concerning the Physical Characteristics of the Human Teeth and Gums, the Salivary Calculus, the Lips and Tongue, and the Fluids of the Mouth, together with their respective local and constitutional indications, &c. By Chapin A. Harris, M. D., D. D. S., Professor of practical dentistry in the Baltimore College of Dental Surgery, &c., 8 vo. pp. 119, Baltimore, 1841.

Ruschenberger's Second Book of Natural History.[1]

This is another of those useful volumes, which Dr. Ruschenberger is employing himself so beneficially in editing. His former volume has already been received into some of our public schools, and we trust both it and the present may find their way into all.

Ramsbotham's Midwifery.[2]

This is an excellent work, far superior to that of Maygrier, which is, indeed, in no respect comparable to it, except in being also furnished with numerous plates. Many of those before us are, however, much superior in design, and all in execution; and the same may be said of the accompanying text. Dr. Ramsbotham has had great experience, and is well informed on all that has been written on the branch to which his attention has been mainly directed; so that we can strongly recommend the work not only to physicians but to students as an admirable guide to them. It is exceedingly well got up, and is highly creditable to its enterprising publishers.

Liston's Surgery, by Norris.[3]

The first American edition of this valuable work was published in this "Library," and another edition was published by Messrs. Thomas, Cowperthwaite & Co.; so that, in reality, the edition before us is the third American. The success which it has experienced is sufficient evidence of its merit; and the value of the present edition has been greatly enhanced both by the additions of Mr. Liston, and of the excellent American editor.

Dunglison's Dictionary—New Edition.[4]

We extract the following remarks from the author's preface to this *third edition.*

"The second edition of this work was exhausted so soon after its appearance, that not many new terms were introduced, in the interval, into medical nomenclature. These have been added, with several that had escaped the author in the former editions. He has likewise incorporated in the body of the work the synonymes, which formed an index of not fewer than *twenty thousand* words in the last edition.

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[1] Mammalogy, Natural History of Mammiferous Animals. Second Book of Natural History, prepared for the use of Schools and Colleges. By W. S. W. Ruschenberger, M. D., &c. from the text of Milne Edwards and Achille Comte, Professors of Natural History in the College of Henry IV. and Charlemagne, with plates: 12 mo. pp. 151. Philada. 1842.

[2] The Principles and Practice of Obstetric Medicine and Surgery, in reference to the process of parturition; illustrated by one hundred and forty-two figures. By James A. Ramsbotham, M. D., &c. &c. First American edition revised. Royal, 8 vo. pp 458.

[3] Practical Surgery; with one hundred and fifty engravings on wood. By Robert Liston, Surgeon. 2d American from the third London edition, with additional notes and illustrations. By George W. Norris, Surgeon to the Pennsylvania Hospital, 8 vo. pp. 588. Philada. 1842.

[4] Medical Lexicon. A New Dictionary of the Medical Science, containing a concise account of the various subjects and terms, with the French and other Synonymes, and formulæ for various officinal and empirical preparations, &c. Third edition greatly

"The circumstance of the work not being stereotyped enables the author to be constantly enlarging and improving it; and he has no doubt, that the present edition will be found to possess stronger claims on the attention of the practitioner and student than its predecessors."

MISCELLANEOUS NOTICES.

Jefferson Medical College.—The Catalogue of this Institution sufficiently exhibits its eminently flourishing condition. Last year it numbered 163 names. This year it has 209! The course has been most satisfactory and effective, and the students will disperse to their homes full of enthusiasm for their Alma Mater.

Of the 209 Students, there were from

Maine, - - -	1	Ohio, - - -	9
Massachusetts, - -	2	Michigan, - - -	1
New Hampshire, - -	2	Tennessee, - - -	3
Connecticut, - -	3	Kentucky, - - -	3
New York, - - -	8	Mississippi, - - -	4
New Jersey, - -	9	Illinois, - - -	1
Pennsylvania, - -	98	Indiana, - - -	1
Delaware, - - -	4	Iowa Territory, - -	1
Maryland, - - -	4	West Indies, - -	2
District of Columbia, -	1	Upper Canada, - -	1
Virginia, - - -	38	Nova Scotia, - -	1
North Carolina, - -	3	Ireland, - - -	1
South Carolina, - -	2	England, - - -	1
Georgia, - - -	3		
Florida, - - -	1	Total, - - -	209
Alabama, - - -	1		

A large number of Graduates in Medicine, from the various Colleges in this country and Europe, attended, some of whose names are included in the present catalogue.

At the Philadelphia Hospital, and occasionally at the College, Dr. Pancoast, the Professor of Anatomy, performed before the class many surgical operations of great moment; and every Wednesday, a Clinique was held by Dr. Mütter, the Professor of Surgery, at which, also, numerous important operations were performed.

Medical Department at Yale College.—The Catalogue contains the names of 47 medical students, and at a recent commencement, the degree of Doctor of Medicine was conferred on 19 individuals.

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modified and enlarged. By Robley Dunglison, M. D., Professor of the Institutes of Medicine, &c., in Jefferson Medical College, Philadelphia, Lecturer on Clinical Medicine, and attending physician at the Philadelphia Hospital; Secretary of the American Philosophical Society.

Ohio Lunatic Asylum.—From the third annual report of this useful institution, it appears, that the average number in it for the present year is 143; the per centage of recoveries in all cases discharged was 54.32; the per centage of recoveries in the old cases discharged, including 18 discharged by the directors for want of room, was 23.80; and the per centage of recoveries, in the recent cases discharged, was 87.17.

The Institution appears to be well conducted, and to have a competent medical superintendent.

Geneva Medical College.—The establishment of another Medical College in the City of New York has not had the effect of injuring the country intution of Geneva. On the contrary, the Catalogue exhibits a large increase of students. The summary of the present session gives 156 students, 48 physicians "attending part course," and 7 classical students, who attend the course of anatomy:—total, 211.

Kiestein as an Evidence of Pregnancy.[1] By H. Letheby, A. L. S.—In No. 11 of the Guy's Hospital Reports there is a valuable paper upon this subject, by Dr. Bird, in which he enumerates many cases to prove the existence of this principle in the urine of pregnant women. Since the publication of that report I have had many opportunities of investigating the subject; and, as the result will show, it forms an important addition to the already known symptoms of pregnancy. The object of this paper, however, is not only in furtherance of its value as such a test, but to point out certain precautions to be observed in the experiments, in order to prevent fallacy.

The urine should be procured at a time when the woman is as free from disease as possible; and I believe that passed early in the morning, after rest, gives the least variable indications. This should be exposed, in a tall narrow glass, to a continuous temperature of about 70° of F.; if a much lower temperature than this is used, say about 40°. I have known the urine stand for more than a fortnight without undergoing any change, although it be replete with kiestein or its principles, at a temperature of 70°. However, if the woman be pregnant, we shall observe, in two or three days, the first indication of its presence by the urine becoming turbid. In a day or two more a thin pellicle forms on its surface, and this gradually acquires consistence up to a fortnight from the onset of the experiment. But long before this time you will have noticed its characteristic odour; certainly not like cheese, to which Dr. Bird compares it, but precisely analogous to the smell of raw beef beginning to putrefy: it is emphatically a *putrid smell.* I have kept the urine more than a month after this, but it never loses either its pellicle or peculiar odour.

Besides the error likely to arise from the adoption of too low a temperature, where the kiestien would not be separated, I would warn the earlier experimenter not to fall into the opposite error of confounding the pellicle which forms upon all urine on standing, especially that which contains the lithates in excess; the more so as the general as well as microscopic appearance of this pellicle is often precisely like that of kiestein. The appearance I am now alluding to, however, is never accompanied with the putrid animal odour; but, on the contrary, gives out a copious smell of ammonia, and when disturbed falls immediately to the bottom of the liquid. These are the two especial distinctions.

On the value of this test I shall be very brief:—Of the 30 cases examined by Dr. Bird, 27 gave the required indications of the presence of kiestein; the other 3 were at the same time suffering under febrile excitement. Dr. Bird could not detect it in the urine of unimpregnated women, or after parturition, and during suckling.

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[1] London Med. Gazette, Dec. 24, 1841, p. 505.

In the American Medical Library, as quoted by the British and Foreign Medical Review for October last, is a report of the experiments of Drs. M'Pherters and Perry, the resident physicians at Philadelphia Hospital. These gentlemen found it in the urine of 24 out of 27 pregnant women. Of the three negative cases, two were not in health when experimented on; further, they could not detect it in the urine of 27 unimpregnated women.

In my own experiments, which have been made at all dates between the second and ninth month of utero-gestation, there was unquestionable evidence of kiestein in 48 out of 50 cases. I am unable to account for its absence in the two exceptions, for I took care at all times to have the urine from women as free from disorder as possible.

In 17 non-pregnant women there was no indication of its presence. In examining the urine of 10 women during the time of suckling, I found *it* in all immediately after delivery, but that the evidence of its existence fell off at a period between the second and sixth months.

A question now naturally arises as to the cause of the presence of this principle, and what is its composition? It appears easily accounted for on the known sympathy that exists between the uterus and the breasts; the latter of which, taking cognizance of the gravid condition of the uterus, prepares itself betimes for the proper performance of that function which by and by is to become its necessary duty. Certain principles analogous to those of milk being imperfectly secreted, may, in this nascent condition, become reabsorbed; because, as Dr. Bird suggests, they do not find a ready outlet, and getting into the blood are excreted thence by the kidneys; and this habit of reabsorption may go on for some little time after the birth of the child.

The composition of kiestein is not so easily made out: examined by the microscope it consists at first of a multitude of globules, varying in size from the one thirty-two thousandth to the one eight thousandth of an inch; after a time these break up, or coalesce and form flakes, and then crystals of triple phosphate generally become pretty abundant in it. This shows that the greasy appearance of the pellicle is not due, as Dr. Bird supposes, to the triple phosphate, for this is after formation; nor are these globules composed of fat, for they are perfectly insoluble in ether. I have not been able to detect them in the urine until it becomes turbid, so that they appear to be formed in the urine after expulsion. They are soluble in alkalies and in boiling acetic acid, and give all the reactions characteristic of coagulated albumen or fibrin: to these, then, they are most analogous; but nothing but an ultimate analysis can determine their identity or not. The globules do not differ in appearance from those contained in milk, but their complete insolubility in ether shows that they do differ.

9 *Windsor Terrace, City Road, Dec.* 6, 1841.

M. Dubois on the Auscultatory Signs of Pregnancy.—The uterine *souffle* is usually perceptible about the fourteenth or fifteenth week of pregnancy: the period at which it may be first heard, being, no doubt dependent upon the amount of development of the uterus and its elevation above the os pubis. The point at which it is most frequently audible is towards the middle of the height of the uterus on its anterior or lateral (generally the left side) part. In this respect M. *Dubois* differs from M. *Naegele*, who states that the common situation of the uterine blowing sound is in one of the inguinal regions, extending thence upwards. In most cases, the space over which it may be heard is limited to a circle of two or three inches in circumference. A curious circumstance connected with this sound is the occasional changeableness of its situation; on one day it is inaudible at a spot where it had been distinctly heard the day before, and *vice versa.*

Obstetrical auscultators should be aware of this fact; else they will be apt to be perplexed in some cases. We may mention likewise that the uterine *souffle* varies much at different times in its loudness and distinctness, being one day scarcely audible, and on the next, perhaps, very distinct.

That the development of this sound is somehow dependent upon the circulation of the blood through the uterus, appears from the fact that it is always much enfeebled, or even altogether suspended, by the contractions of the organ during parturition—a fact which abundantly proves that the sound cannot proceed from the pressure of the gravid uterus on the iliac arteries, as some writers have alledged. The striking resemblance of the uterine *bruit* to that perceived in erectile tumors, and in aneurismal varices, confirms the above opinion. M. *Dubois* objects to the appellation of placentary or utero-placentary being applied to this blowing sound, for the reason that, although its locality most frequently corresponds with the attachment of the placenta, it continues to be audible for some time after the expulsion of this body, and in other cases after the death of the fœtus.

The other sound, that of the fœtal heart, is a still more decisive sign of pregnancy: the number of the pulsations varies, according to the experience of M. *Dubois*, from 135 to 150.[1] This tictac sound is usually most distinctly perceived on the anterior part of the abdomen somewhat to the left side: it is rarely audible before the completion of four, or four and a half, months of pregnancy.—*Medico-Chir. Review, Jan.* 1842. *p.* 197.

Phthisis Pulmonalis, with a Fistulous Opening in the Parietes of the Chest.—The following case, exhibiting a very rare complication of phthisis, deserves the notice of the pathologist.

A man, 38 years of age, and who for a length of time had been extremely subject to attacks of catarrh, was seized in May, 1839, with pneumonia; this yielded to active treatment, but there remained behind a dry cough, and a feverish state, accompanied with frequent chills. In the beginning of July, a phlegmonous swelling made its appearance immediately below the right mamma; it gradually increased in size, and, as a fluctuation became distinctly perceptible, an opening was made into it and gave issue to an enormous quantity of a purulo-sanguineous fluid of a suffocating odour. This discharge continued night and morning usually to the amount of three or four ounces; the opening was situated between the fourth and fifth ribs.

For three weeks there was no reason to believe that a communication existed between the outward orifice and any of the bronchial tubes; but, on the 20th of August, it was observed for the first time that air escaped with a bubbling noise during the act of expiration, and when the patient coughed or spoke. It was easy to trace, by listening to the direction of the cavernous *souffle* which was very distinct, the course of the fistula inwardly. The pectoriloquy also was so loud that it seemed as if the patient spoke directly into the ear of the auscultator. Two months subsequently, a second opening between the fifth and sixth ribs was formed, and gave issue to a purulent discharge mixed with air. In the first week of December, the patient expectorated for the first time a small quantity of purulent sputa. There commenced also at this time occasional attacks of orthopnœa; but the breathing during the intervals was not much distressed: the emaciation was extreme.

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[1] It is a curious circumstance, that the late Dr. Hamilton, so long the distinguished professor of midwifery in the University of Edinqurgh, most stoutly maintained that the pulse of the child in utero, and also after birth until breathing commenced, seldom exceeded 60 or 70 pulsations in the minute. In our notice of his last work, in the number of the Medico-Chirurgical Review for July 1836, we questioned the accuracy of the doctor's assertions, and incurred in consequence his wrathful criticism. Our readers may find it worth their while to revert to his pamphlet, and our rejoinder, in the number of this review for January 1837.—*Rev.*

A remarkable feature of the case was an exceedingly constipated state of the bowels, with an almost voracious appetite. On the 9th of January, the fifth rib was nearly exposed for about two inches in extent, being covered only by a few pale granulations; the quantity of the discharge by the wound continued as before; but the expectoration had quite ceased. The denuded portion of the rib became necrosed, and was gradually detached in small pieces. The patient died exhausted on the first of April.

(We suppose that a dissection was not permitted, as there is no mention in the report of the appearances after death.)

REMARKS.—It is doubtful whether the formation of the abscess in the parietes of the chest was the effect of the pulmonic lesion extending itself towards the surface, or whether it was not rather a simultaneous disease developed accidentally over the situation of the cavern in the lungs. The circumstance of no air being observed to escape for three weeks after the opening of the abscess may lead us to adopt the latter opinion.—*Archives de Medecine Belge.*

We observe that M. *Raciborski* recently exhibited to the Royal Academy a case in which a tuberuclous excavation of the lungs communicated with a subcutaneous *foyer.* The disease, says that gentleman, seems to be confined to a point of the left lung over the fourth or fifth rib; the respiratory sound being normal over the whole of the front of the chest. Over the spine of the clavicle and near the root of the bronchi, a loud gurgling noise is heard, especially during the fits of coughing. The pulmonic abscess communicates with the subcutaneous cellular tissue at this part, and the skin there is observed to be distinctly lifted up during each fit of coughing. By applying the hand over the part not only may this rising of the skin be perceived, but a sensation of the displacement of a fluid may also be felt. Compression causes the swelling to disappear, and occasions a peculiar sound arising from the retrocession of the air and fluid.—*Johnson's Medico-Chirurgical Review, Jan.* 1839, *p.* 218.

Memoir of a Gentleman born blind and successfully operated on in the 18th year of his age. BY DR. FRANZ.[1]—At the birth of this young gentleman (the son of a physician) the eyes were found to present a twofold defect of organisation. Both eyes were turned inwards to a great extent—and cataract existed in both. Towards the end of the second year, keratonyxis was performed on the *right* eye, which was followed by iritis, and wasting of the eye-ball. Within the next four years, two similar operations were performed on the *left* eye, without any success, but with no destruction of the eye. The colour of the opacity, at length, became of a clearer white, and some faint perception of a strong light was experienced by the boy.

Into the long and minute description of the state of this gentleman's eyes in his 18th year (1840) we cannot go. It appeared that the *right* eye was completely amaurotic, and the *left*, which had become atrophied, was the only one considered fit for an operation. The following were the steps taken.

"On the 10th of July 1840, in the presence of Dr. Swaine, and with the kind assistance of Messrs. F. Fowke and F. Steinhaeuser, I made an incision in the cornea upwards, and introducing a pair of fine curved forceps, armed with teeth, into the posterior chamber, I seized the anterior wall of the capsule by passing one of the blades of the forceps into its small aperture, and attempted by pulling it slowly to separate it from its adhesion with the uvea and its peripheral connection, in which I succeeded without producing a prolapsus of the vitreous body, or tearing the capsule, which I now removed. After this proceeding, a large piece of the lens of an opaque colour, probably the nucleus, presented itself in the pupil, which was easily removed from the eye by means of Daviel's spoon; the pupillary aperture then appeared perfectly clear and black. The patient was now turned with his back to the light, for the purpose of trying a few experiments as to his sight, but from these I was obliged to desist on account of the pain which the light produced in the organ. Both eyes were then closed with narrow strips of court-plaster, and the patient carried to bed. Venesection, local bleeding, fomentations with iced water, continued without intermission for about forty-eight hours, together with the scrupulous observance of the most severe regimen, barely succeeded in keeping down the inflammation, the effects of which in this case, where but one eye offered hope, were much to be dreaded, if it should surpass that degree which was necessary for the healing of the wound in the cornea. This process went on and terminated so favourably, that the cicatrix, situated close to the sclerotica, is now scarcely visible. The patient suffered from muscæ volitantes and from a considerable intolerance of light, pain being produced by even a mild degree of light falling on the closed lids. The muscæ volitantes were greatly mitigated, and the intolerance of light ceased, after the lapse of a few weeks, by the use of proper pharmaceutical remedies, by local bleeding, change of air, &c., and the employment of the ophthalmic fountain of Professor Jungken, which I have fully described in the Medical Gazette, vol. xxvii. p. 444. To promote the development of the power of vision, the use of the fountain was continued twice daily, with Pyrmont-water and latterly with simple spring-water, for the space of three months, when it was discontinued, as it began to irritate the eye."

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[1] Medico-Chirg. Rev. Jan. 1842, p. 274.

On opening the eye on the third day, he perceived a blaze of light, and all objects confused and in motion. He could not distinguish any object. The pain forced him quickly to close the eye. Gradual exposure of the eye to light habituated the organ to its stimulus; and when vision became tolerably distinct, all objects appeared so near to him that he was afraid of coming in contact with them, so that he was constantly correcting the sense of sight by that of touch.

On the 21st September, 1840, Dr. F. operated on both eyes for the congenital strabismus. This operation was so successful, that the gentleman's personal appearance was much improved. In November he was able to read the names over the shop-windows, and to tell the time, to a minute, by St. Paul's clock. The tide of human existence, however, in the streets, so confused and confounded him, that at last he could see nothing. By the spring of 1841, the sight was much improved—and improving. The case, altogether, is very creditable to Dr. Franz, as well as interesting to the profession and the public. The paper is published in the Philosophical Transactions for 1841, Part I.

Division of the Muscles of the Eye in certain Cases of Blindness.—When the central portion of the cornea has become so opaque as to prevent the transmission of the rays of light through the pupil, remaining sound, we may displace the axis of the eye, by dividing one or more of its muscles, so as to induce a certain degree of squinting, and thus bring a transparent part of the cornea in the direct line of vision. Such an operation is much more simple, and greatly less hazardous, than any of the modes which have been proposed to form an artificial pupil.

M. Florent Cunier, a well known ophthalmic surgeon in Belgium, claims the merit of having first performed it.

A man, 25 years of age, presented himself on the 21st of June, at his ophthalmic institution, with a strabismus of the left eye, which had existed from infancy. When two years old, he had suffered from a purulent ophthalmia, which had caused the destruction of this eye, and had left on the cornea of the other a dense opacity, which covered nearly the outer two thirds of its surface; the inner third, which remained transparent, was almost quite concealed in the angle of the orbit, and was visible at those times only when the squint was made to cease. When this was done he could see near objects, by carrying them towards the nose, and then turning the eye as forcibly as possible outwardly. The anterior chamber of the cornea was normal, and the pupil was quite free and readily contracted on exposure to light.

On the 30th of June I divided, says M. Cunier, the internal rectus muscle; and immediately the pupil occupied the centre of the orbit, and the squint vanished. The eye being, however, not sufficiently drawn outwardly to enable the patient to see objects conveniently, I denuded the sclerotic as far as the attachments of the superior and inferior recti, but without causing the slightest degree of squinting outwards. Founding my practice on the experiments made by myself and Mr. Duffin, I divided the inferior oblique muscle; this was no sooner done, than at once the eye was drawn outwards and somewhat upwards. The ecchymosed blood in the cutaneous wound was rapidly absorbed; but the healing of the conjunctival wound was rather tedious, in consequence of the very considerable retraction of the muco-serous membrane induced by the displacement of the eye-ball. Immediately after the operation, the patient was able to guide himself through my garden; and six days afterwards he came alone to my house.

He now sees so well that he can distinguish the smallest objects, when they are brought near his eye. What is remarkable is, that the pupil has become displaced in such a manner that it is now immediately opposite to the transparent portion of the cornea.

CASE 2.—A middle-aged man, who had been blind for 12 years, was my second patient. The left eye was completely wasted; and only a part of the outer half of the right one remained transparent. By compressing the left eye, and turning the right one forcibly inwards, he could perceive the form of large objects. I divided the external rectus muscle, and denuded the sclerotic as far as the insertion of the superior and inferior recti; the eye was immediately drawn inwards so as to cause a squint in that direction, and I was gratified to find that the patient was able to see much more distinctly. Eight days afterwards, he could spread out in the market-place his wicker-baskets, which he made to earn a subsistence.

In the third case, in which the operation for forming an artificial pupil had previously been attempted, but without success, M. Cunier divided the external rectus; and, although the case was certainly a very unfavourable one, considerable improvement of the vision was effected.—*Gazette Medicale.*

REMARKS.—This application of ocular myotomy is certainly one of the most ingenious and scientific that has been proposed. The operation for making an artificial pupil being always hazardous, and seldom successful, surgeons will gladly avail themselves of the practice suggested by their Belgian *confrere.—Medico-Chirurg. Rev., Jan.* 1842, *p.* 211.

NECROLOGY.

We regret to announce the death of Professor DAVIS, of University College, London, well known as the author of some valuable works on Obstetrics:—and also that of Dr. BIRKBECK, to whom the merit is due of having originated the Mechanics' Institution, in Great Britain and elsewhere.

Dr. Birkbeck was highly estimated as a physician and a philanthropist; but has not left behind him any important contributions to medical science.

THE
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New Series.

Vol. I. **February, 1842.** **No. 8.**

ART. I.—QUININE IN ASTHMA.

BY B. R. HOGAN, LATE U. S. A.

The value and importance of *quinine* in all paroxysmal and congestive diseases have secured for it a high place in our catalogue of therapeutic agents. In the latter condition of any of the important organs, it is the safest and most efficacious agent in the materia medica. From its happy influence in relieving congestion, in our autumnal fevers, I was, *à priori*, induced to administer it in asthma. In every instance in which I have given it, or known it administered, the complete relief of the *dyspnœa*, and termination of the paroxysm, have succeeded in an hour. Subsequent attacks have been warded off. The paroxysm is as *tractable* to the influence of quinine as the slightest quotidian.

In the forming stage of croup, two grains of quinine, and a snuff plaster to the breast of a child, two years old, parried the attack.

My friend John A. English, M. D., of Cobaba, Ala., has used it with complete success, in a long standing case of asthma, which had resisted the usual remedies. Four grains of quinine "operated like a charm," and relieved the patient in thirty minutes.

I communicate to you this important effect of quinine, in order that the profession may scrutinise the high claim I set up for it, and, by further experience, direct in what cases it may be most beneficially administered, in one of the most distressing and intractable diseases "which flesh is heir to."

From two to eight grains of the sulph. quinine at a dose, to be repeated in an hour if not relieved.

B. R. HOGAN.

Cambridge, Dallas Co., Ala., Jan. 31, 1841.

ART. II.—DEATH FROM ERYSIPELAS: PRICKS BY A SCALPEL—SLIGHT RAZOR CUT—SCRATCH BY A NAIL—PULLING OUT A MOLE—REMEDY FOR BEE STINGS.

BY JAMES MEASE, M. D., of Philadelphia.

In the month of December last, it was stated in the newspapers, that a young man had died at Framingham, Connecticut, in consequence of using the same razor, (without wiping) to shave himself, which he had just before employed to shave his deceased father. The impression was, that some morbid matter on the face of the father had been applied to that of the son, and had caused his death. The principle of action—*humani nihil à me alie-*

num puto, might have been sufficient for me to inquire about the fact, but more was concerned than the indulgence of professional curiosity, or a benevolent feeling:—a life was in question; I therefore determined to ascertain the particulars, and accordingly addressed a letter to a gentleman resident in the town, requesting a communication of them. From him I received the following printed article, by the attending physician, Dr. Whitney, which appears to have been addressed to the editor of the newspaper, published in the place where the parties resided.

"*Framingham*, *Oct.* 29, 1841.

"Mr. Editor.—Having seen different accounts in the newspapers respecting the death of our very worthy and esteemed townsman (Mr. Henry W. Coolidge) and knowing the circumstances of the case, I take the liberty of stating them to you as they occurred. The aged father, who had been sick for some time, died of a hepatic disease. He had too, as is frequently the case, at the termination of many diseases, a very bad thrush or canker in the mouth, attended with frequent hemorrhages. The son, who had always enjoyed good health and was well at this time, (with the exception of what he termed a cold sore or two on his lip) shaved the father after his decease. Then with the same razor, brush and soap, he shaved himself immediately. This was on Tuesday and by the Saturday following, one of the sores upon the lip became very troublesome, affecting it internally and externally. On Sunday his disease progressed and thus continued daily to increase producing a most hideous swelling of the head and face, till the next Saturday, when he died. The disease was no doubt gangrenous erysipelas. Was it an idiopathic disease, or was it communicated from the father by means of the brush? Should think the latter highly probable.

"Yours, with respect, S. W."

I presume the sores on the lip must have been irritated by the edge of the razor, and given rise to the erysipelas. That the cause suggested was quite sufficient to produce this often unmanageable disease, is probable from our knowledge of its frequent occurrence after apparently slight local affections, and of serious consequences, and even death from them. Many anatomists have died from the irritation roused in the system by pricking a finger with a scalpel. Falck, an English author on syphilis, and of other medical works, and two professors of the Medical School in Dublin, died from the effects of the first accident. Falck, many years since, and the two last within ten or twelve years. Another lost his life from scratching his hand with the sharp edge of a rib. A few weeks since, a man cut one of his fingers when strapping his razor, and died shortly after, from inflammation and gangrene in his hand and arm. Another scratched his finger last year, with a nail in a barrel which he was handling, and died in the same way. I knew a dreadful and mortal cancer which destroyed the lower jaw, and finally life, to follow the pulling out a small mole in the chin; and I have recorded several cases of death from the poison of honey bees, an humble bee, and wasps, which they had manufactured from the sugar, or saccharine fluid sucked by them from flowers, fruits, or sweet cider. Death took place in 10, 20, and 30 minutes after the stings were inflicted.[1] The poison of spiders has been equally mortal as that of bees. But what was the modus operandi of these venoms? why, you will say, they *destroyed the vital principle*,—certainly, —but what is this? the answer leaves the inquirer as wise as before he asked the question. Here is a fine and new subject for a prize essay, by some learned medical corporate body. By the way, since the publication of my paper just referred to, a case occurred in the vicinity of Philadelphia, of a bee-sting which was attended with spasms and such high excitement as to require venesection twice. Aqua ammonia was also liberally given with good effect. This remedy should be applied immediately to the part after a sting, and also given internally, every ten or fifteen minutes, in doses of 10 or 15 drops in water, and the vapour inhaled by the nostrils.

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[1] Amer. Journal of Med. Sciences, for Nov. 1836.

ART. III.—ON THE PSEUDO-MORBID APPEARANCES OF THE BRAIN AND ITS ENVELOPES.

BY ROBERT PATERSON, M. D., &c.[1]
Physician to the Leith Dispensary.

The object of the present communication is to take into consideration the pseudo-morbid changes which take place in the brain and its envelopes.

These changes present themselves under the forms of colourations and softenings,—appearances with which, as arising from disease, every medical man is familiar; but which sometimes are noticed, and bearing a very marked character, when few or no symptoms have existed during the life of the patient, to give rise to the suspicion, that such a state of matters would have been found after death. In such cases, we shall find a ready explanation of the phenomena in pseudo-morbid changes.

During the course of a series of experiments on pseudo-morbid ramollissement or softening, as occurring in the brains of the lower animals, we had occasion to draw up a table showing the different parts of the brain which were successively affected with pseudo-morbid softening, and, upon comparing this table with others which were drawn up after a similar manner from the works of Abercrombie, Andral, Louis, Bright, &c., some striking similarities were noticed with regard to the parts which were first found softened from disease and from pseudo-morbid change.

This similarity at once suggested the idea, that, in consequence of this source of fallacy, some mistakes may have occurred; more especially with the authors in this country, as here the same facilities for the examination of dead bodies does not exist, and often a much longer time is allowed to elapse between death and dissection.[2]

It shall be our object to point out the circumstances connected with this source of fallacy, so that it may in future be guarded against.

We use the term pseudo-morbid in the consideration of this subject, not only as it has been employed by the most recent writers on these phenomena, but because it includes the many appearances, (unconnected with disease,) which may take place immediately before death, at the moment of dissolution, and subsequent to that event. The terms cadaveric, *post mortem*, pseudo-inflammatory, inflammatoidal, and M. Andral's cadaveric or *post mortem* hyperemic appearances, have each been applied to the phenomena in question; but the term which we have adopted seems preferable to any of these, on account of its more extensive signification.

CAUSES OF PSEUDO-MORBID PHENOMENA IN THE BRAIN.

The causes which operate on the brain, and give rise to pseudo-morbid colourations and softenings are four in number.

I. *Obstruction in the course of the Venous Circulation occurring shortly before death.*—Cases of slow asphyxia furnish illustrations of this. Dr. Bright has given a beautiful instance of it in a case of obstructed circulation through the large veins;[3] and M. Andral, speaking of his mechanical hyperemia, says, "Thus, in such a case, the brain, when sliced, presents numerous red points, which are nothing else than the divided orifices of the congested vessels."

II. *Gravitation of the Blood to the more dependent parts (the hyperemia by hypostasis of M. Andral).*—This cause comes into operation most frequently at the posterior parts, in consequence of the manner in which bodies are generally laid out after death. M. Andral believes that we may produce a colouration of the substance of the brain, by simply making the head more dependent than the body. This assertion is contrary to the statement of Drs. Kellie and Abercrombie, and also opposed to experiments which I myself have witnessed on dogs which were suspended by the hind legs, immediately after death. The blood was thus allowed to gravitate towards the head. But on comparing those animals with several others which had been suspended in a contrary direction, and where, of course, the blood was allowed to gravitate towards the posterior extremities, little difference was observed in the quantity of blood which the brains of each respectively contained.[1] The same fact is taken notice of by Dr. Kellie. Whether the result of these experiments is to be accounted for by the difference existing in the method by which the brain of the lower animals is protected from pressure, in consequence of their horizontal position, I am unable to say. But there can be no doubt that in the human brain, colouration is frequently produced by the gravitation of the blood to the depending parts; and it is obviously a most important duty to note the position of the head in the examination of bodies found dead, as well as in many other cases.

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[1] Edin. Med. & Surg. Journ., Jan. 1842, p. 106.

[2] Some of the authors of this country do not even mention the length of time which elapsed, which consequently gives us no room for judging.

[3] Bright's Medical Reports, Vol. ii. Part 1st, p. 6.

III. *Extravasal transudation and imbibition of the Blood, or of some of its component parts, after death.*—This is a cause which is well known to produce ecchymosed spots around the vessels of the scalp, and bloody-serous effusions in the cerebral and spinal arachnoid membrane; and we shall presently have to direct the reader's attention to another pseudo-morbid phenomenon resulting from it.

IV. *Spasmodic action of the muscular system, occurring towards the close of life,* may be enumerated as another cause of the appearances which simulate the phenomena produced by disease. It operates during infancy, when the fontanelles are open, by pressing the blood into the cranial case from the rest of the body; and we shall have further occasion to refer to it as a cause of pseudo-morbid appearances.

Pseudo-Morbid Colourations.—Every medical man accustomed to the inspection of dead bodies must have felt the difficulty of determining, when the substance of the brain was to be considered in a morbidly congested state. Colouration in its various stages has frequently been observed, while the most careful inquiries have failed to detect the previous occurrence of corresponding symptoms; and too often, we believe, have pseudo-morbid injections been regarded as the effects of some inflammatory action supposed to have been going on in the brain.

The appearances which cerebral colouration presents are two in number, the spotted or the "injection sablée" of M. Lallemand, and the diffused or uniform. The spotted redness is allowed by all authors to be simply an increase in the number and size of the red spots which naturally occur. It is best seen in the medullary substance, while the diffused almost always occur in the cortical. The spotted redness is by far the most frequent pseudo-morbid appearance; and it is remarkable that it is also a much surer indication of inflammatory action. It is to be seen in those who die from slow asphyxia, from an impediment to the circulation in the right side of the heart, or in the veins of the upper part of the body. It also happens as a consequence of convulsions, when these take place before the fontanelles are closed. The brain is then exposed to pressure, not only from external agencies, but also from such as act through the circulation, without a corresponding external pressure. The violent muscular contractions of a convulsive attack force the blood along the arteries, and restrain the freedom of its passage through the veins proceeding from the head; an accumulation, therefore, takes place in the vessels and substance of the brain, which are beyond the influence of muscular pressure.

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[1] My friends, Professors Reid and Simpson, who were present at the experiments referred to, were satisfied that little difference existed in the actual quantity of blood in the vessels of the brain. Although in the animals hung up by the tail, and where, of course, the blood was allowed to gravitate to the head, there was such an enormous quantity of blood in every minute vessel of the external parts and bones themselves, that it was impossible to keep it from rapidly passing over and colouring the brain. This gave rise to very fallacious appearances, which, however, were easily proved to be so by taking a clean knife, and making a new slice of the brain, when it was seen of its natural colour; but very soon became red, from the causes formerly mentioned.

By such means, then, may spotted colourations be produced in the substance of the brain, resembling the results of the first stage of inflammation; and all these circumstances must be taken into consideration, before deciding whether a congestion be the result of disease, or a pseudo-morbid phenomenon. In cases where a general appearance of congestion is found, it is important to note the kind of death the person has died, the quantity of blood in the system at the time of dissolution, the position of the body after death, the interval that has been allowed to elapse from death to dissection, the connection of previous symptoms, with *post mortem* appearances, and the concomitant presence of albuminous exudation, or any of the certain proofs of inflammatory action in the membranes, or any part of the brain.[1] "After all," says M. Andral, "this kind of redness can only be considered as decidedly the result of active hyperemia of the brain, when it is very well marked, and even then we must always allow for the kind of death the person has suffered." After due allowance has been made for all the circumstances of the case, and they are found insufficient to account for the presence of the colouration, it may then be pronounced the consequence of inflammatory action.

When the "injection sablée" occurs in particular parts of the brain only, or around an apoplectic effusion, the probability of the colouration being the result of morbid action, is greatly increased. Such, however, is not the case with the diffused redness which is so often met with in the cortical, and occasionally in the medullary, substance of the brain. This kind of colouration is very frequently seen surrounding apoplectic clots; and every anatomist is familiar with it in the brains of subjects which are examined at a considerable interval after death. Occurring under such circumstances, we are inclined to place no reliance on it as a mark of diseased action. The mode of its formation is very simple. The substance of the brain, and especially its cortical parts, absorbs fluid with great facility; extravasal transudation of the serum and colouring matter of the blood goes on after death, and, together with the cerebro-spinal fluid, they are absorbed by the substance of the brain, which thus acquires the kind of colouration under consideration. A similar explanation applies to the zone of diffused redness, which is so often seen around apoplectic clots, and which is produced merely by the absorption of the colouring matter and serum of the effused blood. That such is the case is easily proved by the introduction of coagulated or fluid blood (the latter is preferable) into the brains of the lower animals after death. The diffused redness appears in the cerebral substance surrounding the clot in the course of from eighteen to twenty-four hours after its insertion. This experiment we have repeated several times with the same result. The constant occurrence of a concomitant ramollissement in the red portion has been supposed to add to the likelihood of the diffused redness being a morbid appearance; but a similar softening is as invariably observed in the experiments to which we allude; and it is only what we would naturally expect to find when the serum of the blood has been taken up by the cerebral tissue. We, are therefore, not disposed to attach any importance to the fact, that diffused redness around an apoplectic clot is accompanied by ramollissement, and trust entirely to the spotted colouration

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[1] For, according as the individual has died of a disease, proving fatal by slow asphyxia, or with a large quantity of blood in the system, has lain after death with the head dependent, or if a long time has been allowed to elapse between death and dissection, (or even a short time in warm weather), so must the appearances be judged of, and our opinion modified accordingly.

(whether or not associated with softening) for the proof of morbid action. If the small dots of blood are so increased in size as to form smaller coagula or apoplectic clots around the larger ones, such an appearance may still more surely be regarded as a proof that the softening has been of an inflammatory nature, and has been previous to, if not the cause of, the bloody effusion.

Pseudo-Morbid Softening.—Ramollissement or softening[1] of the cerebral mass, has of late years attracted considerable attention; and we now proceed to consider whether softenings entirely pseudo-morbid may not be mistaken for those which occur as the result of disease.[2] Pale or white ramollissement of the nervous centres (according to M. Andral) presents several degrees. In the first, the change of consistence is perceptible only to the touch; in the second, the nervous substance is so different, that the change is perceptible to the eye; in the third, it is completely fluid, its texture being totally destroyed, and nothing appearing in its place but a kind of cellular structure, which seems to be the original frame-work of the part. In the fourth degree of softening, even this trace of structure disappears, and there is a complete solution of continuity. The softened portion may either preserve its natural colour, or assume a new one, as red, purple, brown, violet, yellow, greenish, &c. Pseudo-morbid softenings, on the other hand, only simulate diseased appearances in the earlier of these stages. They may or may not be visible to the eye, but are always discernible to the touch. The colour is in general not changed; but M. Orfila has seen pseudo-morbid softenings assume all the varieties of colour mentioned above, as green, brown, &c.; so that no distinction can be drawn from the colour of the softened portions, as to whether they have been produced by morbid or pseudo-morbid causes.

We have formerly mentioned that the brain speedily absorbs any fluid with which it may be in contact. This happens even when it is covered with its investing membranes, but to a greater extent when these are removed. The brains of sheep have been allowed to stand for a certain number of hours in a given weight of water, which was rapidly absorbed. The weight was proportionally increased, and the parts most exposed to the fluid were found in a softened state. In one instance the brain was deprived of its membranes on one side, and six hours after death it was immersed in a mixture composed of equal parts of ox bile and water. It weighed three ounces seven drachms and four grains when prepared for experiment. After remaining in the mixture thirty-six hours, it weighed eight ounces and one drachm. It had a dingy yellow colour, which was much deeper on the side where the membranes had been removed. On that side the yellow colour of the bile had penetrated the whole extent of the cortical substance, but nowhere was the medullary matter at all tinged. On the side where the membranes had been left entire, the subarachnoid cellular tissue was quite distended with yellow coloured fluid,[1] and the internal parts of the brain were in a very softened condition.

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[1] The pale or white softening here referred to has been considered by some as a gangrene of the brain (Morgagni, Lieutaud, Baille); by Rostan as similar to *gangrena senilis;* and by Recamier, as a change, *sui generis.* The white softening from putrefaction has undoubtedly precisely the same appearance, in every respect, as the white softening the result of disease.

[2] Softened portions of the cerebral mass are not unfrequently observed at *post mortem* examinations, which at once strike the examiners as being the result of disease, and yet no symptoms have been noticed during life to give countenance to the idea. They are, nevertheless, too frequently set down as the result of disease. Dr. Copland, in considering softening of the brain, and in remarking upon the frequent want of connection between symptoms and appearances after death, says, "It should be kept in recollection, that this state of the cerebral structure, although often preceded by signs of inflammation, and exhibiting in the parts surrounding it inflammatory appearances, is often neither preceded by the one, nor accompanied by the other, on the contrary, with a directly opposite train of phenomena and state of parts."

Such appearances often result, as we shall presently show, from pseudo-morbid changes.

The rapidity with which fluid is absorbed by the cerebral mass suggested a series of experiments, with the view of observing whether the parts in the vicinity of the cerebro-spinal fluid might not acquire a softening liable to be mistaken for the effects of disease. The brains of sheep and oxen were the subjects of our observations. The heads of these animals were procured from the market, all killed within an hour or two of each other. They were kept in a room, the temperature of which was from 50° to 56° of Fahrenheit. They were opened at stated intervals, and, from a minute examination, the following table has been drawn up:—

Interval between death and examination.	*Parts softened.*
1st, 36 hours,	Septum lucidum.
2d, 48,	Corpora striata.
3d, 60,	Commissura magna.
4th, 68,	Anterior part of fornix.
5th, 72,	Internal part of lateral ventricle.
6th, 84,	Cortical substance in general.
7th, 112,	Pons Varolii.
8th, 136,	Hippocampi.[2]

The softenings arising from decomposition, as mentioned by M. Orfila, are seen 1st, in the *commissura magna;* 2d, in the *septum lucidum;* 3d, in the walls of the lateral ventricles.

The situation of the softenings noticed in this and the preceding tables is very similar, and they become most interesting when compared with other tables drawn from the works of authors who have written on morbid ramollissement of the brain. Thus, M. Andral, in order to illustrate the relative frequency of diseased softening in different parts, gives 169 cases from the works of different authors, 33 of which were his own. In these

Softening of the middle lobes occurred in	37
corpora striata,	28
anterior lobes,	27
posterior lobes,	16
optic thalami,	15
circumvolutions alone,	14
one hemisphere in its entire extent,	13
circumvolutions and other more deeply seated parts,	9
dispersed through different points,	5
of the entire hemispheres,	4
parieties of ventricles,	2
cerebral peduncles,	1

A point worthy of attention in reference to the foregoing table is, that, out of the 169 cases, softening took place

In the right hemisphere,	73
In the left,	63
In both,	33

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[1] May not this imbibition of fluid into the subarachnoid cellular tissue take place immediately after death, and be one of the causes of serous effusion being so often found in the arachnoid cellular structure, and so seldom in the sac of the arachnoid in cases of meningitis?

[2] Although in the preceding table we have mentioned the parts which had become softened from the date of each experiment, yet it is important to keep in mind that the parts mentioned in the first experiment, as being found softened, were always found softened (generally more so) in each succeeding one.

The following table has been compiled from Dr. Abercrombie's table on the Diseases of the Brain and Spinal Chord. It shows the relative frequency with which he found ramollissement to occur in different parts.

In the septum and fornix, softening was found in	16 cases.
anterior, outer, and upper parts of hemispheres,	7
centre of hemispheres on a level with, and external to, the lateral ventricle,	6
internal part of ventricles,	4
corpora striata,	2
corpus callosum,	2
posterior part of one hemisphere,	1
upper part of both hemispheres,	1
lower part of one hemisphere,	1
both thalami optici,	1
all central parts,	1

Of 18 cases of white softening, or softening without change of colour, in 14 the *septum lucidum* was affected, and in 12 the *septum lucidum* and walls of lateral ventricles.

Dr. Bright found the relative frequency of softening to take place as follows:—

In the anterior, outer, and upper part of cerebrum in	2 cases.
posterior and middle lobes,	2
parts of brain external to, and on a level with, lateral ventricles,	1
fornix and septum lucidum,	1
corpus striatum,	1

The preceding tables show that great variety exists with regard to the localities in which ramollissement of the brain is most frequently found by different pathologists; still, however, we observe that the parts most frequently noticed to be softened are those in the immediate neighbourhood of the lateral ventricles. It is so in M. Andral's cases, and it is more especially so in those of Dr. Abercrombie.

It must be remembered, however, in looking at M. Andral's cases, that by far the majority of them occurred on only one side of the brain, which at once takes away all idea of their being pseudo-morbid. In Dr. Abercrombie's table, it will be observed, softening of the *septum lucidum* and fornix occurred sixteen times, and in the neighbourhood of the lateral ventricles six times more, which is twenty-two times out 42 cases. It may be further remarked, that the generality of these softened portions are not mentioned to have been altered in colour, or any other particular remark made regarding them, further than that they were softened. The same remark applies to numberless cases which have been recorded, and in which parts of the brain have been simply described as softened, both when symptoms of disease of the brain have been present during life, and also when no such symptoms existed.

To turn to our experiments on pseudo-morbid softenings, and compare the results with those mentioned above, and taken from the works of authors on the diseases of the brain, we shall find that the softenings occur most frequently in the central parts of the brain, and chiefly in the *septum lucidum*, *fornix*, and *corpora striata.*

I do not mean to say that, in consequence of this circumstance, any one of the cases from the authors we have quoted were not genuine cases of morbid ramollissement; I only wish to point out a source from which fallacy may arise, and from which, I conscientiously believe, it has not unfrequently arisen. This latter statement will appear the more likely when we remember that in general, no mention is made, further than that such and such parts were found in a state of softening; no mention is made of the interval between death and dissection; and that no mention is made of the season of the year at which the occurrence took place, the importance of all which are now generally known and recognised.

Softenings may be considered then the result of inflammatory action, when they are surrounded with a zone of red vessels, with small coagula, or if the softened portions are infiltrated with purulent matter,[1] and also, if taking into consideration all the circumstances mentioned above, we cannot attribute them to be connected with pseudo-morbid phenomena.[2] There is another point to which we would shortly direct attention, viz. the connection of softening of the ventricular walls, or surface of the brain, connected with morbid effusion of serum.

Large effusions of serum are found in the ventricles without any softening whatever of the walls of the ventricles, nay, even there is sometimes an unusual hardness in them. Again, with very moderate effusion of serum, we sometimes find the walls of the ventricles extremely soft, and the *septum lucidum* and *fornix* broken down. With regard to the former of these two states, when the ventricular walls are found hard, along with ventricular effusion of serum, we are inclined to look upon this hardness as the result of disease. We have not unfrequently seen cases presenting this state of matters, when a considerable interval has elapsed before dissection, and when we believe in ordinary cases considerable softening would have taken place. And with regard to the latter, or when considerable softening is found with little effusion of serum, it may be remarked that white softening under such circumstances most generally arises from imbibition of fluid by the cerebral substance.

Pseudo-morbid phenomena in the cerebral envelopes.—We have, in the last place, to consider the phenomena belonging to the above head, which the membranes of the brain are liable to present. We shall find that there is only one appearance in the arachnoid and *pia mater*, which is liable to be mistaken for actual disease of the membrane; we refer to opacity of these membranes covering the brain from effusion. It is a well known fact, that in those who die of a lingering disease, and more especially where there is much impediment to the circulation of blood through the lungs, or its return from the head by venous obstruction, there is generally a considerable effusion of serum found under the arachnoid and into the ventricles. Thus M. Louis says, that subarachnoid effusion is generally absent when death is sudden in phthisis, but very common when this disease proves fatal by prolonged agony and impeded venous circulation.[3]

Under such circumstances, then, it is not unusual to find considerable opacity of the arachnoid covering the brain, and occasionally so much is to be seen, that the membrane itself has all the appearance of being thickened, or having an effusion of lymph under it. This is an appearance, however, which is very deceptive, and which is as often produced by simple distention of the membrane by the subjacent fluid as by any other cause. When the membrane is greatly distended in this way, and the meshes of the *pia mater* are also filled, great opacity is the result. A similar appearance is observed in the cornea from over-distension by effusion into the interior of the eye, and which is well known to be removable by simply puncturing it, and the transparency at once returns. The same is observed also when a dead eye-ball is pressed between the fingers; the cornea becomes at once opaque, its transparency, however, immediately returning when the pressure is removed. So with the arachnoid, when effusion exists beneath it, and gives rise to opacity, we have only to make a few punctures in it, and it soon regains its transparency if arising from that cause; if not, we then conclude that the membrane itself is thickened, or that there is effusion of lymph beneath it.

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[1] M. Lallemand imagines, that in every case of white ramollissement the white colour results from purulent infiltration; this, however, besides being denied by M. Andral, obviously cannot be the case, as white softening is the common result of putrefaction.

[2] It is of consequence also to remember, that many slight inflammatory softenings are rendered much more so by pseudo-morbid causes, and more especially in young persons, when the texture of the brain has less consistence than those more advanced in age.

[3] Effusion into the subarachnoid space has been noticed in three fourths of all cases of phthisis, and two fifths of other diseases; the cases all opened early. (Louis.) It is well known also, that, in the fevers of this country there is generally more or less subarachnoid effusion, accompanied, according to Dr. Alison, with no other mark of inflammation. This is quite a pseudo-morbid phenomenon in our opinion, arising partly from the slow manner of death in typhoid fever, and also the interval which is allowed to elapse between death and dissection, as well as the circumstance of its being a disease where both solids and fluids are extremely prone to putrefaction.

This appearance of opacity is not unfrequently to be observed at the inferior and posterior part of the brain from the simple dependence from position of the liquor of Magendie, (cerebro-spinal fluid.)[1] It is easily distinguished from effusion of lymph, however, or opacity of the membrane, by the above method.

It has frequently appeared to us rather a remarkable fact, that while, in inflammation of serous sacs in general, we have the serous effusion taking place into the sac itself, in the arachnoid, on the contrary, this is extremely rare; and we have been inclined to attribute this, partly to the fluid escaping when the sac is opened into, partly to gravitation towards, the base of the brain, and partly to imbibition by the subarachnoid tissue; indeed, this latter phenomenon has appeared to us of more frequent and general occurrence than any other pseudo-morbid phenomenon which the brain and its envelopes present.

BIBLIOGRAPHICAL NOTICES.

Shipman's Report relating to a case of alleged Malpraxis.[2]

A distinguished surgical friend has kindly communicated to us the following view of the merits of this case. It accords with the sentiments almost universally expressed on the subject. With the concluding observations, every one desirous of preserving the dignity and harmony of the profession, cannot fail to accord.

"My dear Sir—I have looked over the 'Report of the facts and circumstances' relating to a case, where a man of intemperate habits, a patient of a county poor house, has brought, by means of a fund raised for the purpose by subscription, a suit for malpraxis against his attending physicians. These were Drs. Goodyear and Hyde of Cortland Co. N. Y., who were discharged from attendance on the case, by the authorities of the house to make way for Drs. Shipman, Carpenter and Patterson. In the change, which called them into charge of the case, the latter gentlemen appear to have had no agency. The plaintiff suffered a compound fracture of the lower part of the leg, with protrusion of the bones, which were reduced, and the limb, it appears to me, was judiciously dressed in the extended position by Dr. Shipman. The patient then came under the charge of the two first named gentlemen, who, as it would seem, without sufficient reasons, altered the plan of treatment, by placing the limb upon a double inclined plane, leaving the foot so unsupported as to allow it to roll outwards, and the end of the tibia to protrude, which ultimately became necrosed, and the wound verminous. The immediate question of medical dispute was the propriety of amputation in *this* state of the limb, 10 or 12 days after the occurrence of the injury; a question which might well be considered doubtful by judicious practitioners. My own views, considering the general good condition of the patient, would have led me to follow the practice so successfully pursued by Dr. Shipman and his associates,—excision of the dead portion of the bone and the treatment of the limb in the straight position. Much complicated medical testimony was given, and the case terminated without result, the patient withdrawing the suit.

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[1] The cerebro-spinal fluid is said to be all absorbed in twenty-four hours. This does not coincide with our observations, we having generally found it in considerable quantity at a much later period. Extravasal transudation, however, begins to take place about that time, and the subarachnoid effusion and consequent opacity is frequently earliest noticed in the immediate neighbourhood of the large venous ramifications.

[2] A Report of the Facts and Circumstances relating to a Case of Compound Fracture, and Prosecution for Mal-practice, in which William Smith was plaintiff, and Drs. Goodyear and Hyde were defendants, at Cortland village, Cortland Co., N. Y., March, 1841, comprising statements of the case by several medical gentlemen, together with Notes and Comments on the Testimony. By A. B. Shipman, M. D., 8vo. pp. 35. Cortlandville, 1841.

It is necessary, perhaps, that glaring instances of mal-practice should be exposed, but one cannot but regret to see any medical question,—and there are so many in which men may honestly differ,—publicly agitated and spreading discord in a profession, of which the members, for the sake of the general good and their personal comfort, should live at least on terms of courtesy, if not of harmony, with each other. Yours truly, P."

Coxe on the Agaricus Atramentarius.[1]

The veteran *savan*, whose pamphlet is before us, has given an interesting account of this singular Agaricus; the pamphlet itself, and some of the illustrations, being printed with the ink derived from its deliquescence. Dr. Coxe first noticed the fungus in September, 1812, in his garden, and shortly afterwards, he discovered many of the same kind growing luxuriantly in the grass in different parts of Washington Square, in this city. The plant generally begins to appear from about the middle of August and to its close, and continues until even the middle of November, or later, unless frost should sooner take place; but he has found it at earlier and later periods.

Dr. Coxe details experiments which he made upon it with different reagents, and he adds:

"From several trials, I found the deliquated fluid well adapted to constitute an excellent bistre-coloured ink for drawing; and *from* it I had a drawing made of the plant itself, in its different gradations, from the perfect and recent cone, to its expansion and perfect development of the interior; as seen in the accompanying lithographic plate. I was induced subsequently to try it mixed with oil, for engravings in copper, and found it answer very well. It does not answer so well as a lithographic ink; as, unless great care is bestowed, such is its affinity to the water passed over the stone, that the engraving is smeared by it. I obtained, however, some pretty good ones by this process, and from its great indestructibility, I think it likely that it may be advantageously employed in filling up the writing in bank notes and other papers, as common agents appear to have but little action upon it, without at the same time destroying the paper itself. The principal difficulty will be to discover in what way it may be best cultivated."

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[1] A Brief Description of the Agaricus Atramentarius, with a Statement of some of its singular Properties, and a lithographic view of the Plant in its different changes. By John Redman Coxe, M. D., 8vo. pp. 12. Philadelphia, 1842.

Paine's Materia Medica,[1] *and Answer to Dr. Carpenter.*[2]

The objects of Dr. Paine's therapeutical arrangement are expressed in the title page, but more fully in the preface. They are "*First*, To arrange the *materia medica* upon intelligible, physiological, and therapeutical principles. *Secondly*, To indicate the relative therapeutic value of the various articles, under their different denominations, by arranging them in the order of their value. *Thirdly*, To give the student a comprehensive and ready view of the merits of the various articles composing the *materia medica*, and of their relations to each other, physiologically considered: and, *fourthly*, to supply a convenient means of graduating the doses of medicines, &c.," p. vi.

As an accompaniment to the lectures of Dr. Paine, the work must necessarily be more useful than in any other relation, for in many parts its brevity renders it exceedingly obscure, and the decyphering of the symbols occasions more trouble than the generality of readers will bestow upon it.

On the subject of classification we are disposed to be very tolerant, for but few are found to agree, and attempts at originality are more apt to run in this direction than in others of infinitely greater importance. We think, however, that the classification adopted by Dr. Paine is exceedingly unhappy. His classes are as follows:—1. Antiphlogistics. 2. Permanent Tonics. 3. Diffusible Stimulants. 4. Cerebro-spinants or Nervous Agents. 5. Astringents. 6. Uterine Agents. 7. Urinary Agents. 8. Anthelmintics. 9. Errhines. 10. Chemical Agents. And 11. Diet and Regimen, in a general sense.

Of these classes we can comment upon one or two only. The class of cerebro-spinants or nervous agents is made to comprise, 1. Narcotics. 2. Antispasmodics. 3. Tetanics or cerebro-spino excitants. 4. Moto-paralysants. 5. Senso-paralysants. 6. Cerebro-spino-depressants. 7. Doubtful nervous alterants.

This singular choice of names sufficiently indicates the views of the author in regard to the remedial agents classed under them: but we presume he will find few therapeutists to accord with him. Thus, under *Narcotics* he places opium and its preparations, the preparations of morphia, henbane, lactucarium, Hoffman's anodyne liquor, hops, hemlock, belladonna, stramonium and the lycopus Virginicus; under *Antispasmodics*, all the narcotics, sulphuric ether, assafœtida, camphor, castor, musk, acetic ether, skunk cabbage, cyanide of potassium, cyanide of zinc, ferrocyanide of zinc, valerian, galbanum, tincture of muriate of iron, creosote, cuprosulphate of ammonia, nitrate of silver, sulphate of zinc, sulphate of copper, colchicum, indigo, hydrocyanic acid, hydrocyanic ether, mugwort, oxide of zinc, oil of amber, cobweb, Dippel's animal oil, rue, and oil of turpentine.

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[1] A Therapeutical Arrangement of the Materia Medica, or the Materia Medica arranged upon physiological principles, and in the order of the general practical value which remedial agents hold under their several denominations, and in conformity with the physiological doctrines set forth in the medical and physiological commentaries. By Martyn Paine, M. D., A. M., Author of the Commentaries and of the Letters on the Cholera Asphyxia of New York, and Prof. of the Institutes of Medicine and Materia Medica in the University of New York, pp. 271, New York, 1842.

[2] Dr. Paine's answer to Circular Letters by Drs. Carpenter and Forbes, (from the Boston Med. and Surg. Journal,) 8vo. pp. 8, Boston, 1842.

Our space will not permit us to cite the agents belonging to the other orders of the class cerebro-spinants. We may remark, however, that under the 7th order of *Doubtful nervous agents,* by which Dr. Paine understands "agents whose mode of operation is remarkably peculiar," he places only belladonna and stramonium.

As already suggested, the volume before us, with the aid of the expositions of the author from his chair, may be useful to the student: but we have no hesitation in saying that it would in no respect suit ourselves.

In regard to the answer of Dr. Paine to the circular letter of Drs. Carpenter and Forbes, contained in a former number of this Journal, it may be sufficient to observe, that Dr. Paine is induced to doubt the statement of those gentlemen—that Dr. Carpenter is not the author of the review containing the plagiarism from Dr. Channing. Dr. Carpenter distinctly affirms, that he did not write it. Dr. Forbes confirms this statement. This is enough for us, and we presume for our readers. It is so regarded by every professional gentleman, who has spoken to us on the subject. In respect to Dr. Paine's "Commentaries" we wrote as we thought in the pages of the Intelligencer. Some have been less favourably impressed, as is evidenced by the article in the *British and Foreign Medical Review,* which has given Dr. Paine so much uneasiness. We believe that article to have been written in a spirit of honesty, and with a desire to do justice; and it would have been wise, we think, if Dr. Paine had so thought; or if he had thought otherwise, that he should have suffered the article to be forgotten. For ourselves, we have always been disposed to deprecate replies by authors to criticisms on their works. If the Review has been just, no *reclamation,* especially if exhibiting anger or undue sensitiveness, is of any avail; and if unjust, the public will usually disregard it. Dr. Paine has issued his answer, and has hurled an additional missile at the offenders in the preface to his Materia Medica, and we would now say of the controversy, under the kindest feeling to all parties, and in the language of the cenotaph—*Requiescat in pace.*

Sewall's Pathology of Drunkenness.[1]

This letter is contained in the first number of the *Enquirer,* a paper established by the philanthropist, Mr. Delavan, for the promotion of the great cause of temperance. Professor Sewall's remarks are, therefore, not addressed to the Medical profession. Their object is to show the serious physical evils that result from the abuse of ardent spirits; and they are elucidated by striking lithographic plates—*first,* of the appearances presented by the stomach in its healthy state; *secondly,* of those of the drunkard's stomach; *thirdly*, of those of the same after a debauch; and *fourthly*, of the same after death from delirium tremens.

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[1] The Pathology of Drunkenness, or the physical effects of alcoholic drinks, with drawings of the drunkard's stomach. A letter addressed to Edward C. Delavan, Esq., by Thomas Sewall, M. D., Prof. of Pathology and the Practice of Medicine, in the Columbian College, District of Columbia, fol. pp. 15, Albany, 1841.

The letter cannot fail, we think, of making that impression, of which its philanthropic author is desirous.

Publications of the Baltimore College of Dental Surgery.

In a late number, we had occasion to draw the favourable attention of our readers to a work on Dental Science by Dr. Harris. Since then, we have received vol. 2, No. 1 of the *American Journal and Library of Dental Science*, for September, 1841, which, owing to some inexplicable accident, has been lying in the post office for many months. This must be our apology for not having sooner complied with the request of the editors as expressed on the cover.

We have, likewise, received No. 47, vol. 1, of the *Guardian of Health*, edited by Thos. E. Bond, Jr. M. D., and Chapin A. Harris, M. D., a monthly periodical, which cannot fail to furnish useful information, evidences of which are manifest in the number before us.

But these are not all the recent emanations—direct or indirect—from this active institution. A valedictory address to the students of the College of Dental Surgery has been delivered by W. R. Handy, M. D., Professor of Anatomy and Physiology,[1] which appears to us well adapted for the occasion; and lastly, we have received the second annual announcement of the Baltimore College of Dental Surgery, which contains a history of the Institution, mode of instruction, terms of graduation and of admission, &c. &c. Where so much zeal and ability are exhibited, we cannot doubt the successful issue; and although as a general rule, we object to the exclusive pursuit of specialties in the practice of our profession, this department has been always so completely separated from general, and even from ordinary chirurgical practice, that every attempt at improving the condition of Dental Surgery must receive countenance and favour from the philanthropist. The Baltimore College has led the way, and the dentists of other places must follow, or consent to be esteemed laggard in the race of improvement.

Billing's First Principles of Medicine.[2]

The success, which this volume has met with, sufficiently indicates its appreciation by the profession. Its main merit consists in the plain, frank, and able manner, in which the author canvasses many of the important principles of medical science. He does not always arrive at conclusions that correspond with the results of our own investigations, but we do not esteem his observations the less interesting on that occount. He properly esteems physiology to be the basis of all pathological studies. "The modes," he observes, "by which students may attain a *knowledge of the nature of disease*, after learning physiology or the nature of healthy functions, which is attainable from lectures, are accurate observations of the diseases which take place in external parts, as they are submitted to our senses in CLINICAL SURGERY, and in the functions of internal parts as met with in CLINICAL MEDICINE; and MORBID ANATOMY, the examination of what is the degree and nature of alteration, which has taken place in the structure and the seat of the disease."

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[1] Valedictory Address, delivered before the Baltimore College of Dental Surgery, at its Second Annual Commencement, Feb. 18, 1842. By W. R. Handy, M. D., &c., small 8vo. pp. 16, Baltimore, 1842.

[2] First Principles of Medicine. By Archibald Billing, M. D., A. M., Member of the Senate of the University of London, &c. &c. First American from the fourth London edition, revised and improved: 8vo., pp. 300, Philad. 1842.

The work is well worthy the perusal, not simply of the student, but likewise of the practitioner. It furnishes materials for thinking, as well as for guiding the reflection, of the reader; and consequently belongs to the most useful class of scientific productions.

MISCELLANEOUS NOTICES.

On the Sounds of the Heart. By M. CRUVEILHIER.—From his recent investigations on this subject,[1] M. Cruveilhier is led to infer, contrary to the general belief, and certainly in opposition to our own researches, that both sounds of the heart are seated at the origin of the pulmonary artery and the aorta, and that they are owing to the clacking of the semilunar valves:—that the first sound which coincides with the systole of the ventricles, and the dilatation of the arteries, is the result of the elevation of the semilunar valves which had been previously depressed,—and that the second, which coincides with the dilatation of the ventricles and the contraction of the arteries, is owing to the depression of the semilunar valves by the refluent blood.

The subject of the sounds of the heart is ably discussed in the work of Dr. Hope, commenced in this number of the "Library," which contains, in addition to the experiments of European observers, those of the able and estimable American Editor, Dr. Pennock.

On the Nutritive Properties of Gelatine, and other principles. By M. MAGENDIE.—A commission, consisting of MM. Thénard, d'Arcet, Dumas, Flourens, Breschet, Serres and Magendie, was appointed by the Académie des Sciences of Paris, to inquire into the nutritive properties of gelatine, —Magendie, Reporter. From this report we extract the following conclusions.[2]

First, We cannot, by any known process, extract from bones an aliment, which, alone, or mixed with other substances, can be substituted for meat.

Secondly, Neither gelatine, albumen, nor fibrine, taken singly, can nourish animals beyond a short time, and then very imperfectly. In general those pure substances soon excite insurmountable disgust, so that the animal prefers doing without food to touching them.

Thirdly, The immediate principles above mentioned, when artificially combined, are taken with greater resignation and for a longer time than if they were separated: but in the long run they exert no better influence in nutrition; for animals which eat them even in large quantities ultimately die under all the evidences of complete inanition.

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[1] Gazette Médicale de Paris, No. 32.

[2] Encyclographie des Sciences Médicales, Sept., 1841, pp. 385 and 513.

Fourthly, Muscular flesh, in which gelatine, albumen and fibrine are associated organically, and with other matters, as fat, salts, &c., are enough, even in a very small quantity, for complete and prolonged nutrition.

Fifthly, Crude bones have the same advantage, but the quantity consumed in the twenty-four hours ought to be much greater than in the case of meat.

Sixthly, Every mode of preparation, such as boiling in water, the action of chlorohydric acid, and especially transformation into gelatine, diminishes the nutritive qualities of bones, and seems even in certain cases to abolish them.

Seventhly, The commission is not, however, desirous of pronouncing now on the employment of gelatine, associated with other aliments, for the nourishment of man. Direct experiments, in which they are at this time actually engaged, can alone throw definite light upon this matter.

Eighthly, Gluten alone is sufficient for complete and prolonged nutrition.

Ninthly, Fatty substances, used alone as aliment, support life for some time; but they give occasion to an imperfect and irregular nutrition, in which fat accumulates in all the tissues,—at times in the form of oleine and stearine, at others in that of almost pure stearine.

Existence of a Vegetable in Porrigo Favosa. Many communications have recently been made to the Académie des Sciences of Paris, to show the existence of a vegetable, a *mycoderme* in the Porrigo favosa. This vegetable seems to have the shape of a small tobacco box, and on opening it the cavity is found filled with granules. M. L. Megnier is disposed to refer many other cutaneous and mucous diseases to a vegetable origin.[1]

Phthisis Pulmonalis, with a Fistulous Opening in the Parietes of the Chest.[1]—The following case, exhibiting a very rare complication of phthisis, deserves the notice of the pathologist.

A man, 38 years of age, and who for a length of time had been extremely subject to attacks of catarrh, was seized in May, 1839, with pneumonia: this yielded to active treatment, but there remained behind a dry cough, and a feverish state, accompanied with frequent chills. In the beginning of July, a phlegmonous swelling made its appearance immediately below the right mamma; it gradually increased in size, and, as a fluctuation became distinctly perceptible, an opening was made into it and gave issue to an enormous quantity of a purulo-sanguineous fluid of a suffocating odour. This discharge continued night and morning usually to the amount of three or four ounces; the opening was situated between the fourth and fifth ribs.

For three weeks there was no reason to believe that a communication existed between the outward orifice and any of the bronchial tubes; but, on the 20th of August, it was observed for the first time that air escaped with a bubbling noise during the act of expiration, and when the patient coughed or spoke. It was easy to trace, by listening to the direction of the cavernous *souffle* which was very distinct, the course of the fistula inwardly. The pectoriloquy also was so loud that it seemed as if the patient spoke directly into the ear of the auscultator. Two months subsequently, a second opening between the fifth and sixth ribs was formed, and gave issue to a purulent discharge mixed with air. In the first week of December, the patient expectorated for the first time a small quantity of purulent sputa. There commenced also at this time occasional attacks of orthopnœa; but the breathing during the intervals was not much distressed: the emaciation was extreme. A remarkable feature of the case was an exceedingly constipated state of the bowels, with an almost voracious appetite. On the 9th of January, the fifth rib was nearly exposed for about two inches in extent, being covered only by a few pale granulations; the quantity of the discharge by the wound continued as before; but the expectoration had quite ceased. The denuded portion of the rib became necrosed, and was gradually detached in small pieces. The patient died exhausted on the first of April.

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[1] Encyclographie des Sciences Médicales, Sept. 1841, pp. 541, 545.
[2] Medico-Chirurg. Rev. Jan. 1842, p. 217.

(We suppose that a dissection was not permitted, as there is no mention in the report of the appearance after death.)

Remarks.—It is doubtful whether the formation of the abscess in the parietes of the chest was the effect of the pulmonic lesion extending itself towards the surface, or whether it was not rather a simultaneous disease developed accidentally over the situation of the cavern in the lungs. The circumstance of no air being observed to escape for three weeks after the opening of the abscess may lead us to adopt the latter opinion.—*Archives de Médecine Belge.*

We observe that M. *Raciborski* recently exhibited to the Royal Academy a case in which a tuberculous excavation of the lungs communicated with a subcutaneous *foyer*. The disease, says that gentleman, seems to be confined to a point of the left lung over the fourth or fifth rib; the respiratory sound being normal over the whole of the front of the chest. Over the spine of the clavicle and near the root of the bronchi, a loud gurgling noise is heard, especially during the fits of coughing. The pulmonic abscess communicates with the subcutaneous cellular tissue at this part, and the skin there is observed to be distinctly lifted up during each fit of coughing. By applying the hand over the part not only may this rising of the skin be perceived, but a sensation of the displacement of a fluid may also be felt. Compression causes the swelling to disappear, and occasions a peculiar sound arising from the retrocession of the air and fluid.—*Rev.*

Pharmacy in France.—The School of Pharmacy in Paris comprises five titular professors, "*professeurs titulaires*," and three assistant professors, "*professeurs adjoints*." The other schools have three titular and two assistant professors. In each school there are also associated assistants, "*agrégés*," appointed for five years, who take the place of the professors in case of their absence, and assist at examinations. In the school in Paris there are five associate assistants, and three in the schools of Montpellier and Strasbourg. The titular and assistant professors are appointed by the minister of public instruction, from a double list of presentations, made, the one by the *School of Pharmacy*, and the other by the *Faculty of Medicine* of the town in which the school is situated. Each list of presentations contains the names of two candidates, but the same candidates may be presented both by the School of Pharmacy and by the Faculty of Medicine. No one can be named as titular professor who is not a doctor in physical sciences, and thirty years of age. The assistant professors are required to be licentiates in physical sciences, and twenty-five years of age. Both are required to have been admitted Pharmaciens in one of the schools of Pharmacy. The associated assistants are to be appointed by "*concours*," in a manner to be hereafter arranged in the council of public instruction. To be admitted to the "*concours*," it will be sufficient to produce the diploma of a Pharmacien and of a bachelor in physical sciences. The director of the school is to be chosen by the minister of public instruction, from among the titular professors. He is to be in office for five years, and is eligible for re-election. Each school is provided with a responsible secretary, chosen by the minister of public instruction, from among the titular or assistant professors. There are also one or more "*preparateurs*," who must have the degree of bachelor of physical sciences, and are appointed by the director, with the concurrence of the professors. The director appoints the officers and servants. The *instruction* in each school, comprises:—

First Year.—Physics, Chemistry, and the Natural History of Medicines.

Second Year.—Natural History of Medicines, Materia Medica, and Pharmacy, properly so called.

Third Year.—Toxicology; and in the practical school, Chemical and Pharmaceutical manipulations.

No candidate can be admitted to an examination for the title of Pharmacien, who has not obtained the degree of bachelor of letters. Besides the two professors in medicine who are appointed to officiate at the examinations, three members of the College of Pharmacy must also be present, namely, two titular or assistant professors, and one associated assistant. The students of the schools of Pharmacy, who have gained prizes at the "*concours*," are exempted from the fees. The amount remitted for each prize is to be regulated by the university. The names of the successful students are published.

The *receipts and expenditure* of the Schools of Pharmacy are carried to the national budget of public instruction. The titular Professor, in Paris, is to receive a fixed annual salary of 4,000 francs; in the departments of 3,000 francs. The assistant Professors, in Paris, are to receive an annual salary of 2,400 francs, in the departments 1,500 francs. The Director is to receive in addition, as a jointure, an annual stipend of 1,500 francs, in Paris, and 1000 francs in the other colleges. The salary of the Secretary, in Paris, is 3,000 francs; in the other schools, 1,500 francs. The salary of the Preparateurs, is 1,200 francs. The payment for attendance at the examinations is 10 francs for those functionaries who are called upon to officiate. The same is allowed to the professors, who are charged with the examination of herbalists. The fee for the annual certificate, granted to each student, is fixed at 36 francs in each of the schools. The charge for examinations remains unaltered; for the first examination, 200 francs; for the second, 200 francs; for the third, 500 francs. The expenses of operations and demonstrations, incurred during the third year, which are defrayed by the candidates, are fixed at 200 francs, in Paris, and 150 francs in the other schools.

The acquirement of the diploma of Bachelor of Letters, will not be required in the candidates for examination, until the 1st of February, 1844.—*Pharmaceut. Transactions. Oct.* 1, 1841.[1]

Clinical Remarks on some Cutaneous Affections.

By W. Davidson, M. D., Physician to the Glasgow Infirmary.[2]

1. *Iodurei of Sulphur for Porrigo.*

Six cases are related. Two will suffice for us.

Case 1.—Charles Biggar, aged 10, a vagrant, was admitted on the 1st February 1840. Scattered over the whole of the head were numerous thick grayish patches of scabs, which, when removed, left the surface underneath perfectly bare and shining, but, in a day or two, numerous small pustules made their appearance, accompanied with considerabie itching. The eruption appeared in the form of small pustules four years ago. In this case, the scabs were first softened by the constant application of poultices for two days; the head was then shaved. An ointment, composed of five grains of the bichloride of mercury to one ounce of axunge, was tried from the 5th February to the 12th, without any improvement. The following was then employed:—

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[1] Medico-Chir. Rev., Jan. 1842, p. 283.

[2] London and Edinburgh Journal of Medical Science, No. 12, and Med. Chir. Rev. Jan. 1842., p. 268.

Iodur. sulphur. . . ℈ij.
Axungiæ . . . ℥ij. Misce.

This ointment was applied daily to the head; and in a few days a decided amendment was remarked.

On the 5th March, the following report was taken.—Pustules and scales are now completely gone, but there are some bald patches on head in the situation of eruption; no itching; surface of skin pretty natural; general health good.

He was dismissed in a few days afterwards.

Case 2.—Duncan M'Intyre, aged 10, a singer, admitted 30th December 1840. The whole head, particularly the forehead, was covered with a thick dry greyish white crust, accompanied with itching, but without discharge. The disease was of four years' duration, and was represented to be of a very inveterate kind. General health good; bowels regular; tongue clean; pulse 80.

℞. Iodur. sulphur. . . ℈ij.
Axungiæ . . . ℥j. Misce.

14th January 1841, or a fortnight after the use of the ointment, the eruption is reported to be quite gone, and the skin covering the scalp natural in appearance.

As a precautionary measure, it was continued until the 22d, when he was dismissed.

Dr. Davidson observes:—

"Porrigo, in all its forms, is often a very unmanageable disease, and even when cured is very liable to return. In private practice, and in the hospital, I have tried almost all the external remedies recommended by authors, but have found none so efficacious as the ioduret of sulphur, having repeatedly succeeded in curing the patient permanently with it, after a long trial of other agents. At the same time, it must be remarked, that the evidence derived from the treatment of this disease in an hospital is liable to this objection, that the future history of the case is frequently lost sight of, and there are consequently no means of ascertaining whether or not the disease returns.

The 1st and 4th cases seem to be examples of porrigo scutulata, and both had all the appearances of considerable inveteracy; and I may here remark, that slight cases are rarely sent to this hospital. This species is generally considered the most difficult of cure, and even though the tendency to pustulation be removed, there is little dependence to be placed on this sign, until the skin becomes natural in colour, or the hair is beginning to grow.

The 2d, 3d, 5th, and 6th cases seem to be examples of porrigo favosa; the yellow pustules and incrustation, the fetid discharge, the matting of the hair, and the pediculi are all characteristic of this species. It is in general a more manageable disease than the p. scutulata, and is more under the power of the ordinary agents employed in its cure. At the same time, it not unfrequently proves somewhat intractable. In the treatment of porriginous affections, the following is a more particular account than what is given in the short history of the cases. The head is first well washed with soap and water, the hair is then cut as short as possible with scissors, a poultice is applied, and continued for a day or two if necessary, to soften the crusts, which being removed as thoroughly as possible, the hair is closely shaved. In general, the ointment is not applied, until the head has been shaved, but if pediculi be present, it is employed from the commencement, in order speedily to extinguish these vermin. The proportion of ioduret of sulphur employed has varied from 20 to 40 grains to one ounce of axunge; but, in general, the latter quantity may be safely used from the beginning, unless there be some unusual inflammatory action present; for it seldom excites any particular pain or irritation. As a general rule, the daily application of the ointment will be sufficient, but, in some cases, it is advisable to use it twice a-day, in order to facilitate the cure.

Alteratives, or any particular internal treatment, have rarely been resorted to, when the general health was tolerably good. Laxatives have occasionally been prescribed, and a mild farinaceous or milk diet."

We can speak from personal observation for the last two or three years, to the merits of the ioduret of sulphur ointment in the treatment of porrigo. We have found it, on the whole, more serviceable than any other application. In cases of porrigo decalvans we have seen it particularly useful. We employ it of greater strength than Dr. Davidson appears to do. One dram of the ioduret to seven drams of lard has been our customary formula, nor have we ever seen that over powerful.

2. *Ioduret of Sulphur for Lepra and Psoriasis.*

Case.—Margaret Phillips, aged 11, admitted 14th January 1841. The extremities were covered with circular patches of small shining white scales, which, being detached, exposed a red and somewhat elevated surface. The eruption, which was confined to extremities, made its appearance in the form of small white scales, and had existed for three years. The patient stated, that it has disappeared three or four times, after various remedies had been discontinued. General health was pretty good, tongue clean, bowels regular. Cap. sol. arsenic. gtt. vj. bis in dies.

℞. Iodur. sulphur. gr. xx. Axungiæ, ℥j. Misce.
App. ung. part. affect. omni note.
Hab. baln. calid. secunda quaque nocte.

25th January. The strength of the ointment was increased to 40 grains to the ounce of axunge. She was completely cured by 3d February, but remained in the house for eight or ten days longer, expecting her friends from the country to take her home. On the 13th February, she was seized with severe conjunctivitis, accompanied with iritis of right eye, which was subdued in about a fortnight; but the lepra showed no symptoms of return at her dismissal.

Case.—John M'Lennan, aged 35, a labourer, was admitted 19th June, 1841. Scattered over trunk and extremities was an eruption, which appeared about eleven weeks ago, in the form of irregular slightly elevated red patches, on the surface of which a thin white scale rapidly formed. Eruption was at first accompanied with slight itching, and the scales being scratched off were rapidly reproduced. Around the knee and ankle joints the patches were more continuous, and the scales considerably thicker than over other parts of the body. When scales are removed, the subjacent surface is smooth, dry, and slightly inflamed. He was a patient in ward 10, for a similar affection, about two years ago, when he got well under the use of baths, ointments, &c. General health good.

Hab. baln. tepid. omni nocte.
℞. Iodur. sulphur. ℈ij. Axungiæ ℥j. Misce.
Abrad. cap. Hab. pil. 1. coloc. comp. om. noct.

The ointment was used every night after the bath, and, on the 23d June, the scales were completely removed over whole body, and the prominence of the red patches greatly diminished.

25th.—The amendment was progressing, but a few new papulæ, covered with very thin scales, had appeared on lower extremities, which extended to back and abdomen, accompanied with itching.

Cont. ung. et balneum. Hab. sol. arsen. gtt. x. ter in dies.

July 8th.—Eruption almost gone, a few papulæ have appeared on abdomen, general health good.

July 12th.—Eruption quite gone, a few reddish stains on skin only remaining.

A case of Lepra Vulgaris is given. It is not remarkably satisfactory.

Dr. Davidson remarks:—

"The ioduret of sulphur does not seem to have so much power over lepra and psoriasis as over porrigo; although, in my experience, it has succeeded more frequently than any other agent that I have tried, with the exception of blistering by cantharides. Lepra alphoides, being a milder disease than lepra vulgaris, is more under its influence, as well as the milder forms of psoriasis, particularly in children; but the species named inveterata would prove somewhat intractable to this as well as to other remedies, as I had occasion to witness in a patient, who, although benefited considerably, was not cured; he was unfortunately carried off by fever before the result was ascertained.

"Three other patients affected with lepra and psoriasis have been treated in the Infirmary during last August; two of them have been completely cured, the other is still under treatment, but nearly well; all of them of several years' standing, and having employed a variety of medicines before admission. In one of the cases, a female, who had been using large doses of arsenical solution before her admission, which she was obliged to lay aside, the comparative effects of the ioduret of sulphur, and the acetum cantharidis were tested, the first upon the lower extremities, and the second on the arms. From the result of this and other trials, I am satisfied that the latter is the more powerful as a local agent in this disease. The acet. canth. however, was found too weak when prepared according to the formula in the Edinburgh Pharmacopœia; the proportion of cantharides was therefore doubled. It is proper, however, to state, that strong pyroligneous acid was alone used, without the addition of the acetic. Some other formulæ were tried for the purpose of producing ready vesication, such as an ethereal and an alcoholic solution of cantharides, which succeeded moderately well in some cases; but the speedy evaporation of the menstruum seemed to prevent their thorough action. The following preparation, which was applied with a small brush, answered the purpose pretty well, viz. one part of cantharides to three of a mixture of equal parts of castor oil and alcohol, especially when the flies were suspended in the oil, as suggested by Dr. Leslie, apothecary to the Royal Infirmary. The following liniment, however, which is a modification of the Emp. Canth. E. P., is superior to any preparation that I have tried. It is sufficiently soft during warm weather to be applied with a brush, but requires to be heated when the temperature of the air is low.

℞. Axung. Ol. Rapii, P. Cantharid. ā ℥j.

"In order to succeed with either of these vesicating agents, the skin ought to be previously softened either by means of the warm bath, or sponging with warm water."

[The Brandy and Salt so scornfully dealt with in the following article, has had a fitful existence with us amongst some of those credulous souls who are ready to embrace every folly of the day, no matter how extravagant it may be. There must be some tub to amuse the whale, and this is perhaps as harmless as any.—Ed.]

Brandy and Salt—a remedy for various Diseases. By J. H. Vallance. Price 6d.[1]—Morison's pills, that Lion or Leviathan of Allopathy—the lung-stretcher of Ely-place—mustard-seed—animal magnetism—nay homœopathy itself, may now hide their diminished heads. "Brandy and Salt" cure all diseases, and the remedy is within the reach of every individual, from a duke to a dustman. There never was a more ingenious invention, a more felicitous combination than "brandy and salt." The brandy makes the heart glad—and the salt increases the thirst for more brandy! Lucky invention—especially for the great promulgator, who has an extensive brandy-manufactory in France. None but the veritable *eau de vie* will have any virtue in combination with salt. Bett's and Booth's stuff are worse than useless—that produced in "la ferte imbault," by W. Lee, Esq. is the elixir vitæ! Mr. Vallance appears to be the high priest of the temple of health in this country, and having been cured of a "bad leg," gratefully proclaims the following joyful tidings to suffering mortals.

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[1] Medico-Chirurg. Rev. Jan. 1842, p. 163.

"To all who acknowledge the superintending care of a Divine Providence, the discovery of the remedy will appear as *a special gift from Heaven.*"

If this be not the height of blasphemy we know not what is! The way in which Providence imparted this mighty secret to Mr. Lee, is somewhat remarkable. The estate of "La Ferte" was so much over-run with mosquitoes, and these little buzzing animals were so fond of English blood, that the proprietor had some thoughts of giving up his purchase, and returning to his native town of Leeds. But, just at this juncture, Providence imparted to him the grand secret—the remedy, not only for mosquito bites, but for all the ills to which flesh is heir! Mr. Lee was too great a philanthropist—and too religious withal—to let this precious communication from the Deity remain unproclaimed to the nations of the earth. The "Leeds Mercury" had the honour of heralding the glad tidings, and now the pamphlet of Mr. Vallance will spread the "providential discovery"—we beg pardon—the divine annunciation, to the ends of the earth! Messrs. Lee and Vallance, however, are extremely candid and honest. They frankly admit that "brandy and salt" will probably fail in rendering man immortal, by reversing the decree—"dust thou art, &c." *See p.* 10. This is a "heavy blow and great discouragement" to the believers in the divine annunciation. There is one consolation, however, in the fact that, where the remedy fails to ward off death, it will, at all events, if freely employed, during life, preserve the body afterwards from corruption, and render it of little use to anatomists in their dissecting rooms.

The saturated solution of salt in brandy ("best French," mind) is to be taken at first, in the dose of a table-spoonful, early in the morning, mixed with water as hot as can be borne by the mouth and throat of the patient. In case of "worms or *paralytic* attacks," it is to be taken undiluted!! In order that all the glory of the remedy should be secured to the proper owner, it is strictly forbidden to take any other kind of liquor than the "brandy and salt" during the cure. This is a cunning law, for the remedy will be sure to be taken to the full extent of the prescription—"and something more"—as Lord Lyndhurst would say,—during the course of the treatment. We must admit, indeed, that there is some modesty in Mr. Vallance's pamphlet. For, while Morison recommended his pills in *all* diseases, Mr. V. has only culled out forty of the principal afflictions, to which mankind is liable, for the exhibition of "brandy and salt." Why he did not throw the remainder of the catalogue into the bargain is best known to himself—perhaps he did not know the names of the others, or found them rather too jaw-breaking, if he consulted Good's Nosology.

Among these "forty thieves" which daily rob us of the most valuable articles of our property—health, we find the following culprits who are sure to be exterminated by brandy and salt:—viz. gout, consumption! inflammation of the lungs, asthma, scrofula, palpitation, inflammation of the brain, cholera, insanity, cancer, "fevers of all kinds," paralysis, tic douloureux, spinal complaints, enteritis, mortification—and twenty-four other grievous maladies!! A large list of cases, cured of the various diseases enumerated in the pamphlet, is published at the end of the work. Mr. Vallance naively observes, in conclusion, that he has been at considerable expense in advertisements, &c. to make this remedy known—"*but very few of my correspondents recollected to enclose a remittance.*" He therefore pretty broadly hints that he will work no more *gratuitously* for an ungrateful public, and that those who choose to apply to him for his pamphlet, must inclose six "PENNY STAMPS!" For actual advice, "ONE SHILLING" must be forwarded, which is to be carefully secured by wax or wafers, as the money has frequently oozed out, and came not to the hand of the philanthropic dispenser of a divine gift to mankind!

While government permits, and while a community swallows such gross and unequivocal charlatannerie as this—and it is merely a sample—how preposterous is it to merge half, or rather three fourths of our grievances in the "counter practice of the chemist and druggist!!"

Dr. Robinson of Baltimore.—We are pleased to observe in a recent Baltimore paper, a preamble and resolutions unanimously adopted by the Medical Class of the University of Maryland, in testimony of their high appreciation of the services of Dr. Robinson, who, at the request of the Faculty, undertook to assist Professor Smith in his anatomical course. We have no doubt whatever, that the estimable gentleman richly merited the grateful tribute.

Jefferson Medical College.—At a meeting of the class of the Jefferson Medical College, on Friday evening, February 25, 1844. (At the close of the session.) H. W. Ducachet, Jr. of Pa., in the chair; A. N. Bell, of Va., Secretary.

On motion, *Resolved*, that a committee, consisting of one from each state or territory, be appointed to draft resolutions expressive of the feelings of the class in reference to the present Faculty and arrangements of Jefferson Medical College.

The following gentlemen were appointed on the committee:

D. T. Trites, Pa.
W. W. Sweat, Maine.
E. K. Willard, Mass.
O. Sumner, Conn.
O. W. Kellogg, N. Y.
E. B. Richman, N. J.
G. C. Jones, Del.
J. H. Miller, Md.
C. R. Harris, Va.
G. I. Musgrave, N. C.
R. W. Woddrop, S. C.
B. F. Rea, Georgia.
L. Paullin, Florida.
C. F. Williams, Ala.
E. Brown, Ohio.
E. G. Desnoyers, Mich.
L. M‘Kee, Iowa T.
W. E. Brown, Tenn.
H. M. Whitaker, Ky.
S. Emanuel, Miss.
W. H. C. Shellers, Ind.
I. F. Von Bretton, W. I.
F. A. Rees, England.
P. M. O‘Brien, Ireland.
W. E. Cook, Nova Scotia.
O. Ayer, M. D., N. H.
W. B. Jones, M. D., D. C.
J. Woolverton, M. D., U. C.

The committee reported the following preamble and resolutions, which were adopted.

Whereas we deem it our duty, before dispersing to our respective homes, to offer a just tribute to the Professors composing the Faculty of Jefferson

Medical College, and to the very valuable course of instruction given during the past session. Therefore:

Resolved, That we highly appreciate the zeal and ability with which the newly appointed professors have executed their arduous and important duties, as well as the marked and uniform kindness and courtesy exhibited by them and the other members of the Faculty on all occasions—both in their professional and private intercourse with us.

Resolved, That we deem the weekly surgical cliniques instituted in this College, together with the Medical Dispensary connected with the same, of the highest importance to the student, by affording him the means of observing and participating in an extensive medical and surgical practice throughout the year.

Resolved, That we consider the present organisation of Jefferson Medical College affords, in our opinion, every possible facility for acquiring a sound theoretical and practical knowledge of the various branches of Medical Science.

Resolved, That a copy of the foregoing resolutions be presented to the Dean of the Faculty, with the request that they be published in the next annual announcement.

Quain's and Wilson's Anatomical Plates. By Pancoast.—We are glad to observe, that Messrs. Carey & Hart have issued a prospectus of this expensive work,—expensive, that is, in the original, costing upwards of 100 dollars—for 15 dollars. It is, in our opinion, the most splendid work of the kind that has appeared. Its authors are practised and excellent anatomists, and not less informed in the various relations which that important department bears to medical science in general. The plates, in the original, are faithful representations of the human frame as exposed on dissection, and are beautifully delineated.

Such a work, executed throughout with the same care as the lithographic plates which have been exhibited to us, and under the supervision of so able an anatomist as Professor Pancoast, must be esteemed a cheap and most valuable addition to our stock of anatomical works; and we cannot doubt, that it will be eagerly sought after by the student; as well as by the practitioner, to refresh his memory on important occasions.

New Medical Journal in Boston.—A Quarterly Medical Journal has been advertised in Boston, to commence—provided sufficient encouragement be received—in July next. The editorial department is to be under the care of Dr. Charles E. Ware and Dr. Samuel Parkman.

The undertaking has our best wishes; and we are satisfied to adopt the language of the advertisement—"that ample materials, of sufficient interest and importance, exist, to support with credit both a weekly and quarterly journal in New England."

THE

AMERICAN MEDICAL INTELLIGENCER.

New Series.

Vol. I. **March, 1842.** **No. 9.**

Art. I.—REPORT OF THE MEDICAL MISSIONARY SOCIETY'S HOSPITAL AT MACAO, CHINA, 1840–41.

By Wm. B. Diver, M.D., and B. Hobson, M.B., F.R.C.S.

[We have been favoured by Dr. Diver, who has recently returned to this country, and settled in Ohio, in the practice of his profession, with the following Report, which exhibits the advantages afforded to the Chinese by the benevolent exertions of the officers of the Medical Missionary Society of China, of which we have been for some years an honorary member. Whether any other important results are to flow from the establishment of the society remains yet to seen.]

In July, 1838, the Society's Hospital in Macao, as mentioned in a former Report, was first opened for the reception of patients. It was closed on the 5th of October following, in consequence of the absence of a medical officer to take charge of the establishment. On the 1st of July, 1839, it was reopened: but, owing to the extraordinary events of that year, it was found necessary to suspend its operations on the 15th of the subsequent month. During that short space, 169 patients applied for medical aid. Although medicines were administered for some months afterwards to occasional applicants, the doors of the hospital were not again thrown open to receive either in or out-patients until August, 1840. From that time, the benefits of the institution have been conferred, without much interruption, on all who applied. The cases that have come under treatment have been various, but, as will be seen from the subjoined list, are chiefly surgical. A few of the more important ones were admitted into the wards, and if their circumstances required it, a small allowance of money was granted to buy rice and fuel. Many more would have gladly availed themselves of the convenience the wards afforded, had it been considered expedient at the time to receive them.

Of the diseases of the eye, which form such an essential and important class of the maladies of the Chinese, catarrhal and chronic ophthalmia, acute conjunctivitis, granular lids, entropium, pterygium and trichiasis, seem to be the most general. These ophthalmiæ, which the native physicians appear never to attempt to remedy, from neglect or irritation, usually excite a varicose state of the vessels of the conjunctiva, and a thickened vascular condition of the cornea and tarsi, terminating in opacity, leucoma and final loss of vision. In the catarrhal and acute ophthalmia, although the practice of employing local stimulants is not recommended by some high authorities in ophthalmic surgery, yet the use of nitrate of silver from 5 to 10 grs. to an ounce of distilled water, has been found very successful, joined with aperients, in their treatment. Strong solutions also of subacetate of lead, and sulphates of copper and zinc, have proved of the greatest service in the chronic ophthalmia with granulations and opacity.

Cutaneous diseases also form a principal part of the diseases of the Chinese. *Pustular Scabies* affects the lower orders to a great extent, and although often formidable in its appearance, is rapidly cured by the application of sulphur with some oxide of mercury. A similar kind of treatment has been very successful in curing *Psoriasis annulata.*

The ulcers, enumerated, include ulcerations succeeding wounds, injuries, and other causes, affecting different parts of the body, but chiefly the inferior extremities. They are very numerous among the working classes, arising probably, from the heavy weights borne, a poor vegetable diet, or want of cleanliness. From neglect and inappropriate applications, they often become large and indolent, but by means of ablution and dressings of warm water, escharotic solutions, or stimulating ointments, they speedily assume a healthy appearance. As it is difficult to obtain linen, a kind of paper, manufactured by the Chinese, which is soft, flexible, not easily rent, and peculiarly well adapted to spread ointments upon, has been in a great measure substituted, and in the place of oiled silk, oiled paper of a superior quality, also prepared by the natives, has been used with great advantage: this, brushed over with a thin coating of gum arabic, forms an efficient adhesive plaster for small wounds.

August 20th.—A native was brought into the Hospital with a gun shot wound of the thigh, received during the engagement which took place the day previous between H. B. M.'s troops and the Chinese stationed at the Barrier. The ball entered the anterior and upper portion of the thigh, passed close to the femoral artery in a transverse direction, and lodged in the adipose tissue under the skin on the opposite side. An incision was made over it, and the foreign body extracted without difficulty. The wound thus made was kept patulous for a few days with small strips of lint covered with simple cerate, to allow of the discharge of sloughs which came away and left the passage clean. Healthy granulations formed; the wound healed, and the patient was discharged.

September 19th.—A man entered the wards with a gun shot wound of the foot, received during the *battle of the Barrier.* The ball entered the sole, as the foot was raised in the act of running, and passed through, injuring in its course the small bones of the instep.

The patient, upon being informed of the true state of the case; that time and patience were requisite to allow an opportunity for cure, expressed himself dissatisfied, and soon after was removed by his friends.

In April, a patient aged 24, was admitted with a gun shot wound of the leg: he stated, that he received the shot from a Portuguese soldier, who suspected him unjustly to be a thief. It was followed by much hemorrhage and pain. A native friend, seeing the ball near the outlet of the wound, forthwith by a gash cut it out. About two days afterwards, he came to the Hospital. The ball had entered posteriorly by the side of the tendo achillis, two inches above the inferior extremity of the fibula, leaving a round, ragged wound, and, comminuting that bone, remained flattened and uneven at the surface of the wound in front. The incision which had been made to extract it, was three inches in length, parallel and close to the anterior tibial artery. Several loose portions of bone were removed, warm water dressings applied, the leg rolled, and its position fixed.

The wound quickly granulated and healed, with the exception of a sinus anteriorly, which was kept open by portions of loose bone still left deeply in the wound. These gradually becoming more superficial, were taken out with little injury to the soft parts: in a month, the patient was dismissed, the leg being straight and strong.

In September, a boy aged 16, from the country, was admitted as a patient, with three large sloughing ulcers of the leg. His health was impaired, and his pulse quick and feeble: therapeutic agents were administered, and the ulcers at first poulticed, and afterwards dressed with solutions of nitrate of silver and sulphate of copper, and the ordinary stimulating ointments,—but no benefit followed their use; on the contrary, the ulcers assumed a phagedenic character, and attended with irritative fever; other remedies also equally failed in checking the progress of the ulceration. Opium, dissolved in nitric acid slightly diluted was now applied, and happily produced an immediate change; the deep sloughs of muscle, nerves and vessels were thrown off, and all the sores presented a healthy granulating appearance. The warm water dressing, with the occasional use of sulphate of copper in solution, now speedily healed them.

The abscesses usually met with are large and chronic. Those of the scalp are frequent. Carbuncles, which are so common in hot climates, often come under treatment. Acute rheumatism has not yet been observed, but ,on the contrary, chronic rheumatic pains of the joints and muscles are daily seen, arising probably from the usual causes of cold and damp in winter.

Wounds and contusions have been numerous: some have been severe from attacks by pirates. The chief character has been lacerated and superficial.

In September, a man aged 40, from the island of Honan, near Canton, entered the Hospital, suffering excruciating pain from retention of urine. On examining the patient, it was discovered that he was frequently subject to these seizures, but they were of short duration compared with the present, which had existed three days. The bladder was readily recognised, distended with fluid, and rising up to the umbilicus; the pulse quick, and countenance anxious. The urine was immediately drawn off by a silver catheter: it was dark, of strong ammoniacal odour, and exceeded two quarts. The next day it was necessary to renew the operation, and, for many days afterwards, changing the size of the catheter. The prostate was five times its natural size, and the urine deposited large quantities of thick, white sediment, which, on examination, was found to be chiefly the magnesio-phosphates. Active purging, with the daily use of the catheter, in three weeks restored him to his usual health; he returned subsequently to offer thanks, and continued well. As future attacks might reasonably be expected, a silver catheter was made for him at his own expense, which he learned how to use. Other cases of retention from stricture, or enlarged prostate, have been similarly treated; with the warmest thanks for the relief imparted.

Two cases of dislocation, one of the humerus into the axilla, and the other of the first phalanx of the thumb upon the anterior surface of the metacarpal bone, may just be noticed. Both had been dislocated for more than six weeks when they applied for admission. The first was occasioned by a fall from the mast to the deck of a ship, and the other from a blow. In the one case, extension and counter-extension were steadily maintained for two hours and a half, by means of ropes and pullies; and the other, for a considerable length of time, and repeatedly, by a small cord fixed with a clove hitch; but neither of them could be reduced, though the system was nauseated by tartarised antimony.

A few interesting cases of thickening and deposition of serum in the cellular tissue of the leg, greatly distorting its size and shape, have been treated successfully, with stimulating liniments, equal and continued pressure by rollers, and saline aperients. But as soon as the pressure is removed, and the patient begins to walk, the disease has a tendency to return, and the integuments thicken and become hard, as in elephantiasis.

Some cases of enlarged spleen have come under observation, but too few at present to remark upon.

From the many opportunities that have presented, in examining the effects of opium-smoking upon the Chinese, some allusion to it may be expected. It is the unbiassed conviction of observers, that its habitual use is injurious to the health and happiness of those addicted to the practice. Its baneful influence is insidious, but certain; and its moderate indulgence, if means permit, lays the foundation for its continued and increasing use.

The three cases of poisoning, mentioned in the list, were produced by swallowing large doses of the extract of opium, under the influence of excited feelings: two were dead before remedies could be employed; the other, a young female, recovered, having vomited the opium before it could be absorbed into the system.

Further remarks upon the nature and character of the diseases of this and the neighbouring provinces will be reserved for a future report, when more ample opportunity has been afforded to form an important and extended analysis of them.

REGISTER OF DISEASES TREATED IN M. M. S. HOSPITAL AT MACAO, CHINA, FROM AUGUST, 1840, TO JULY, 1841.

Diseases of the Eye.

Catarrhal ophthalmia	35	Epiphora	6
Chronic ophthalmia	21	Hypopium	3
Conjunctivitis, acute and chronic	38	Glaucoma	1
Cataract	22	Iritis	6
Entropium	16	Nyctalopia	4
Ectropium	4	Synechia posterior	1
Granular lids	43	Closure of the pupil	2
Opacity of cornea	35	Loss of vision	11
Ulcers of cornea	8	Diseased eye-lids	11
Staphyloma	5	Conical cornea	1
Pterygium	28	Ptosis	1
Leucoma	10	Tumor of upper lid	1
Trichiasis	15	Enlarged caruncula	1
Amaurosis	12	Abscesses of lachrymal sac	1

Diseases of the Skin.

Scabies	97	Herpes	7
Psoriasis	47	Bullæ	1
Lepra	7	Ichthyosis	1
Impetigo	9	Erysipelas	1
Porrigo	9		

Diseases of the Chest.

Acute bronchitis	2	Catarrh	33
Chronic bronchitis	17	Asthma	2
Hæmoptysis	8	Chronic laryngitis	1

Diseases of the Abdomen.

Dyspepsia	30	Inguinal hernia, congenital	1
Ascites	4	Umbilical hernia, congenital	1
Diarrhœa	16	Hæmorrhoids	7
Enlarged spleen	5	Constipation	5
Inguinal hernia	4	Gastrodynia	2

Diseases of the Urinary Organs.

Retention of urine from enlarged prostate or stricture	10	Ulcers of prepuce and glans penis	6
Hydrocele	8	Bubo	8
Diseased testis	5	Dysuria	3
Phymosis (congenital)	2	Gonorrhœa	9

Diseases of the Uterine System.

Amenorrhœa	3	Prolapsus uteri	1
Suppressio mensium	2	Inflammation of pudenda	4

General Diseases.

Ulcers	220	Thickening of cellular tissue of the leg	11
Abscesses	70	Cachexia	9
Carbuncles	19	Diseased cervical glands	17
Rheumatism	96	Varicose veins	11
Lumbago	6	Enlarged thyroid gland	6
Intermittent and continued fever	13	Inflammation of tendo-Achillis	7
Onychia	14	Encysted tumors of the face	2
Whitloe	7	Ganglia on tendons	4
Inflammation of joints	18	Poisoning by taking a large dose of the extract of opium	3
Morbus coxarius	5	Deformity of the bones of the foot, from light and irregular bandaging	1
Dislocations	4	Anomalous, or unnecessary to name	64
Fractures	3	Vaccinations not recorded.	
Necrosis and caries	9		
Exfoliation of the outer table of the skull	1		
Exfoliation of the lower jaw	4		
Anasarca	17		

General Summary.

Ophthalmic diseases	342	Contusions	35
Cutaneous diseases	191	General and local diseases, not classified	725
Pectoral diseases	75		
Urinary diseases	51		
Uterine diseases	10	Total	1457
Wounds	41		

ART. II.—ANNUAL REPORT ON SURGERY, READ BEFORE THE COLLEGE OF PHYSICIANS OF PHILADELPHIA.

By Dr. Parrish, November 2, 1841.

[From the "Quarterly Summary of the Transactions of the College of Physicians of Philadelphia,"—an old and most respectable body—we extract the following Report; and we may embrace the occasion to express our satisfaction, that the deliberations of the Society are to be laid before the profession periodically. The American Philosophical Society has regularly published its proceedings for the last three years; and the Academy of Natural Sciences has done the same for a shorter period. Both Societies are, we believe, highly impressed with the advantages of a course, which has been found so serviceable to the true interests of science elsewhere; and we are satisfied that the experiment cannot but be successful in the case of the Institution whose first 'Summary' is now before us.]

In presenting the Annual Report on Surgery, the writer must plead his recent appointment, and the absence of any precedent to guide him in the preparation of such a report, for the defective manner in which the duty is accomplished.

Without attempting to enter into minute details of the various new ideas, and improvements, which the retrospect of the past year might furnish—he will merely attempt briefly to sketch, some of the more important features which mark the present era of Surgical Science. And first it may be stated, as a general remark, that the progress of the science, in some of its departments, has been remarkably rapid within the past few years—not a few novel operations have been devised, which have added greatly to the resources of the art, and have tended to elevate it in the scale of importance. A gradual advance is also apparent, in the principles which regulate the treatment of surgical diseases.

The office of inflammation, as a means of repairing injuries, or in other words, the distinction between inflammation, as a destructive process, and as a means of cure, appears to be now generally understood and appreciated.

The necessity of counteracting the sudden impression produced by violent injuries, by the use of opiates, stimuli, and other appropriate constitutional measures, is also generally conceded—as well as the importance of supporting the system, by nutritious diet and tonics, during the process of reparation, in extensive surfaces.

Opium, as a means of allaying pain, is also very generally employed in the treatment of surgical cases and before operations; the dread of its stimulating properties, once so general, having nearly passed away, at least within the sphere of our inquiries.

Simplicity of dressing and apparatus in the management of wounds, fractures, &c., seems to be preferred to complicated contrivances; tight bandaging is less employed than formerly; while rest and position are more urgently insisted upon.

Much attention has recently been devoted by surgeons to the constitutional treatment of surgical diseases, and many improvements have been introduced, which have rendered a resort to painful and mutilating operations less frequent. The scrofulous affections of the glandular system, which form a large class of tumours, as well as diseases of the joints, and other portions of the body, are treated with more certainty of success than formerly. The introduction of iodine and its preparations has been supposed by many to have contributed greatly to this result. Without controverting this point, it may perhaps be affirmed, that the more rational and comprehensive views which prevail in reference to the influence of hygienic measures in counteracting the tendency to scrofulous diseases, and in averting their progress when formed, have had a most salutary effect upon the practice. Much discussion still prevails in reference to the treatment of syphilis. The mercurial and non-mercurial practice, as applied to primary chancres, have each powerful advocates, and many facts are adduced in corroboration of both systems.

The advocates of the latter method, are said to be gaining ground in France and England, and not a few are to be found in this country. In the treatment of secondary symptoms, we believe, however, that mercury is cautiously employed by both classes of practitioners.

The publications of Ricord of Paris, on this subject, have exerted a powerful influence on modern opinion, both in Europe and in this country. This surgeon has devoted himself with peculiar assiduity to the investigation of the nature and treatment of syphilis. His opportunities for this purpose have been ample, and perhaps it may be said, unsurpassed by any of his contemporaries. He has charge of a large venereal hospital, with an average number of 150 patients, besides many out-door patients, together with a very extensive private practice in this class of affections. The opinions of such a man are certainly deserving of marked attention; and we cannot more appropriately carry out the intentions of the present Report, than by presenting a brief abstract of them, as derived from an intelligent medical friend, Dr. Lang, who, but a few months since, enjoyed the advantage of instruction from this eminent teacher.

M. Ricord divides syphilis into three classes of symptoms, viz.: the primary, the secondary, and the tertiary. He has incontestibly shown, by inoculation, that of these symptoms the primary alone are contagious, the others being capable of being transmitted by inheritance alone. The primary symptom, *chancre*, in some of its forms, ought never, according to Mr. R.'s system, to be attacked by mercury in any form, but should be treated by local means. Should the patient apply to the surgeon within the first five days of the existence of the chancre, he should attempt its destruction by cauterisation, which should be as deep as prudent, in order, if possible, to convert the chancre into a simple ulcer. If he does not succeed in this, or if the disease has existed a longer time than that mentioned, he should attempt, by frequent superficial cauterisations, and dressings with aromatic wine, gradually to modify its surface, and in this way he will usually cause the ulcer to heal without any constitutional infection. Mr. R. thinks the chances of secondary disease are much increased by the administration of mercury. The reasons he gives for this are, that mercury has a powerful antiplastic effect, and thereby prevents the healing of the chancres, and moreover, that it stimulates the absorbents to carry the virus into the system. M. Ricord asserts that there is no authentic case on record of a chancre, destroyed within the first five days of its existence, giving rise to constitutional symptoms. Under the head of chancre, are of course included those ulcerations which follow the opening of virulent buboes. Nothing is of greater importance in the treatment of chancre, than frequent dressings, as the pus acts, if allowed to remain, as a permanent cause of disease; the dressings should, therefore, be renewed three or four times a day, or even oftener, according to the abundance of the suppuration.

In the regular uncomplicated chancre, the local treatment usually suffices, but should it have a tendency to become indurated, the induration frequently prevents cicatrisation, and even if it does cicatrise, the induration remaining, the patient cannot be considered as cured. M. Ricord considers the induration as an evidence that the constitution has become affected, and, in order to prove this, he frequently leaves a large number of those in his wards who are affected with indurated chancres, without general treatment, and sooner or later the secondary eruption makes its appearance, although in many cases the chancres had healed, leaving the induration which only yielded to the treatment for the secondary affection. If this position of M. Ricord be true, and it would seem to be so from his experiments, it is easy to account for the assertion of Hunter, that every truly syphilitic chancre must be followed by the general infection unless treated by constitutional remedies. As Mr. Hunter considered the indurated chancre as the only one truly syphilitic, he and M. Ricord are of the same opinion.

The phagedenic chancre is a variety which Mr. R. has found the greatest difficulty in curing. He says that he has known it to last for years without, however, ever giving rise to the secondary disease, unless it has become indurated, which he considers a fortunate thing, as it will then yield to the general treatment. During the time Dr. Lang was attending the Hospital, there were several phagedenic chancres in Mr. R.'s wards, which had resisted every kind of treatment usually employed, some of them had lasted from six to eight months. Having heard something of the treatment of chancres by the tincture of iodine, he determined to apply it in these cases, and he was delighted to find that without exception they all improved under its use, and in a very short time were all cured. This led him to make a systematic course of experiments on the use of this preparation in chancres in general; his results did not, however, show any particular efficacy in cases of common chancre, but where there was any tendency to a phagedenic character its employment was followed by the happiest results.

Secondary Symptoms. The secondary symptoms, according to M. Ricord's division, includes all that well known class of diseases of the skin, and mucous membranes of the mouth, nares, &c. which closely follow the primary affection, such as maculous, papulous, squamous, and pustulous eruptions, mucous tubercles, &c. &c. &c. When the chancre becomes indurated, he thinks it a sufficient evidence of the contamination of the constitution, and immediately commences the mercurial treatment, united to the use of sudorifics, particularly sarsaparilla, which, however, he thinks has but little effect, and he only gives it on account of the vulgar prejudice in its favour. The form of mercury that he prefers for internal administration is the protoidide, which he gives in pills, containing one grain each. He commences by one pill every evening, and gradually increases if he finds that the dose is not sufficient; never, however, increasing as long as the patient is benefited by the dose he is giving. Salivation, he thinks, should by all means be avoided, and if the mouth becomes affected, the remedy should be suspended, to be recommenced when the salivation is cured. In addition to the general treatment in the mucous tubercle, M. Ricord uses a wash of the solution of chloride of soda (Labarraques) and then sprinkles the tubercles with dry calomel; he considers this as a truly specific treatment, and usually cures the local symptom by it in the course of a fortnight. In syphilitic iritis, with the mercury should be used antiphlogistics, belladonna, and in fact, all the remedies used in the same disease when not dependent upon syphilis. Opium is much used by Mr. R. wherever there is irritability or pain accompanying any symptom.

Tertiary Symptoms. This class of symptoms is generally developed very long after the primary disease; some of the cases occur even after the lapse of twenty or thirty years. The most common tertiary symptoms are, deep seated tubercles of the skin and mucous membranes (syphilitic lupus), osteocopic pains (syphilitic rheumatism), periostitis, osteitis and its consequences, caries and necrosis, nodis, &c. &c. M. Ricord says that the mercurial treatment, which is of little use, and often even hurtful in the primary disease, during the period of progress, becomes a powerful agent as soon as the induration commences, and shows its greatest efficacy when the characteristic secondary affection is at its height, again losing in a great measure its curative properties in the tertiary symptoms. The medicine which he considers as specific in this class of symptoms is the iodide of potassium, and in many of the symptoms it has effected a most rapid cure. Frequently Dr. Lang has seen patients enter the Hospital, who had suffered for months the most intense agonies from syphilitic rheumatism, rendering sleep almost impossible, and who, by the use of this medicine, have generally been relieved in the short space of four days, and generally within a week. Another of the symptoms in which it has appeared to be particularly beneficial, is the deep ulceration of the throat which follows the submucous tubercles of this part, and so frequently carries away a great part of the soft palate. The progress of these ulcers is generally stopped in the course of two weeks, and they then speedily heal. M. Ricord usually commences with this medicine in the dose of thirty-six grains, and increases it eighteen grains about every four days, provided its effects are not produced. His mode of administering it is in solution of hop tea made with an ounce of hops to the pint of boiling water, which is allowed to infuse for four hours; he then adds thirty-six grains of iodide of potassium, which is taken in the course of a day. The only effect produced by the medicine besides the cure of the disease, is an increase in the appetite of the patient. In a few rare cases it will produce a little gastric irritation or a diarrhœa, and the dose should then be lessened. It is used in all the tertiary symptoms with great benefit, but in those which I have mentioned its effects are surprisingly rapid.

There are some cases of constitutional syphilitic disease, which cannot be classed either with the secondary or tertiary symptoms, but partake of the character of both: these cases are most advantageously treated, according to Mr. R., by combining the mercurial treatment with that by the iodide of potassium.

During the past year several new operations for the cure of deformities have been introduced amongst us.

Much attention has recently been bestowed upon this branch of Surgery, especially in Germany, where the operations referred to have originated—

and so important are the results of these investigations deemed, that the relief and cure of deformities has been erected into a speciality under the name of Orthœpedic Surgery.

The division of tendons, muscles, and fasciæ, is now extensively practised in cases where mechanical measures alone have heretofore been relied on. Many cures are reported as having been performed, in the several varieties of talipes or club foot, by division of tendons which it is thought would have resisted mechanical means, or would have been a much longer time under treatment, if trusted to these means alone. On the other hand, it has been asserted, that a properly constructed apparatus will accomplish all the ends which the division of the tendon can effect, in a period equally short, and with less injury to the limb. Without hazarding the expression of an opinion on this subject, it may safely be asserted, that much of the evidence on both sides of the question lacks that certainty and phisolophical accuracy which should distinguish medical testimony.

Cases have been reported as cures, long before sufficient time had elapsed, for the ordinary operations of nature to effect those changes in the form and of the limb, to adapt extensive surfaces which had been distorted from birth, to such a condition, as could alone justify us to pronounce the case as cured.

Many surgeons, charmed with the novelty and simplicity of the operation of dividing a tendon, and delighted with its immediate effects, have been led into hasty reports of success, which perhaps their more mature consideration would scarcely justify. It is by time and more enlarged observation alone, that the value of this operation can be tested, and that its claim to be ranked amongst the improvements of Surgery can be established.

The method of operating now generally pursued was devised by Stromeyer, of Hanover, and is certainly both safe and ingenious. The operation of dividing the tendo achillis is not new; it was first performed under the direction of Thilenius, an Italian, in 1784, and was repeated by Satorius, Delpech, and Stromeyer. The latter surgeon has, however, been chiefly instrumental in awakening general attention to it, and in extending the cure of other deformities.

Dr. Detmold, formerly of Hanover, now of New York, was amongst the first who operated in this country, and by his report of cases published in the American Journal of Medical Science, for May, 1838, the attention of American surgeons was generally awakened to the subject. From that period, to the present time, the operation has been extensively practised, both here and abroad, and many reports of its results have been published.

The division of muscles has been practised in the deformities of the lower extremity, besides club-foot, as also in that distressing affection called wry-neck.

Another operation which has excited a very general interest, is that recently devised by the celebrated Berlin Professor, Dieffenbach, for the cure of strabismus.

The account of this operation reached us about the middle of the past year, since which period it has been practised in a great number of cases. The results are said to be most gratifying, and the failures rare. The testimony afforded upon this subject, has also been of a doubtful character, many cases having been reported through the newspapers and other unprofessional channels, before sufficient time had elapsed, to test the actual results of the operation. From reports which can be relied on, however, there seems to be no doubt that some cases of strabismus have been cured, and that the operation may be ranked among the improvements of modern Surgery; whilst it is equally true, that its indiscriminate application to all cases, is absurd and highly detrimental to the best interests of science.

It is also to be remarked, that the short period which has elapsed since the introduction of the operation, does not enable us to judge with precision of the ultimate effects which the division of one or more muscles of the eye may have upon the actions of the rest. May not the division of the internal rectus, for instance, produce a tendency to eversion of the eye-ball, under the action of the opposing muscle, long after the immediate effects of the operation have passed over? It is said, that this result has occurred in some instances. How far it is to be apprehended in other cases, time alone must determine.

We shall notice one other operation of still more modern date, being the product of the present year. We allude to the operation for stammering, also devised by the Berlin Professor, Dieffenbach. This consists of an incision carried completely through the tongue at its root. Three methods are described by the Professor. First: The transverse horizontal division of the base of tongue. Secondly: The subcutaneous transverse division, leaving the mucous covering undivided. Thirdly: The horizontal division, with excision of a wedge-shaped portion of the tongue. All of these methods were experimented upon, and the last alone considered as adequate to the end in view.

When we consider the extreme vascularity of the tongue, together with the great difficulty of arresting hemorrhage issuing from it, we need not wonder that extensive operations upon this member have ever been regarded by surgeons in a serious light, and justifiable only in cases where the life of the patient is in jeopardy.

It is, therefore, truly surprising, that an operation so formidable as that under consideration should be attempted for the relief of a defect, extremely inconvenient and distressing, it is true, but not injurious to the health of the individual. A defect too, which, in a large proportion of cases, is dependent upon habit, or upon peculiar states of mind, and is to be remedied by a protracted system of mental and moral discipline, with appropriate vocal exercises, rather than by a resort to so dangerous an expedient.

The inventor's own estimate of the dangers of the operation are thus stated: "It can never be performed," says he, "by any one who has not the temperament of an operator; the hemorrhage must hold all others at a respectable distance. The extent and importance of the operation, the possible danger to life, or loss of the tongue, through a want of skill in the assistants, who may tear it, when so nearly separated, or from mortification or ulceration of its connecting isthmus—these are contingencies rationally to be feared, and which must be carefully weighed beforehand."

And yet, with these "rational fears" before him, the Professor hesitates not to recommend the operation, and surgeons of eminence, in France and England, are rash enough to act upon the suggestion, even at the risk of human life. And this too, when the results of the operation are doubtful, and before sufficient time has elapsed to pronounce with certainty upon them. No account of the operation of Dieffenbach having been performed in this country has reached us, and we hope, for the honour of American surgery, that no respectable operator will attempt it.

In hinting thus briefly at the several new operations introduced for the cure of deformities, we cannot withhold the expression of sincere regret, that this department of surgery, which, however useful in its place, is still subordinate to the higher aims of the science, which consists in the cure of those various surgical diseases, involving the life or limbs, without a resort to the knife, should be magnified into undue importance, and seized upon by the unprincipled and ambitious, as a means of exciting popular attention towards themselves.

Within the past few years, the records of Surgery have been defaced by the most extravagant accounts of the success of tendon cutting, and other operations to cure deformities. Take the following heading as an example: "Subcutaneous section of forty-two muscles, tendons or ligaments, practised the same day, on the same person, to cure a general articular deformity, by M. Jules Guerin, of Paris."

Cases have been reported as cures long before sufficient time had elapsed to pronounce them as such, according to the fixed cases of nature and the legitimate deductions of reason. Thus it is, that the confidence of the profession on medical testimony is weakened, and the permanent progress of the science is impeded.

We cannot close this subject, without a brief allusion to several novel operations, which have originated in our own city, although they do not belong to the particular period under review.

We shall first designate the operation of Dr. Rhea Barton, for the cure of a most distressing deformity of the lower extremity, from inflammation of the knee joint, resulting in anchylosis. This operation has excited the admiration of surgeons both here and abroad, and may well be ranked among the recent brilliant triumphs of surgical skill; it consisted, as is generally known, in excising an angular portion of the osofemris, a few inches above the knee joint, the apex of the triangle, being on the lower surface of the bone, and the continuity of its shaft being preserved by a thin ledge of bone, which was left untouched.

The loss of this triangular piece, presented of course two cut surfaces of bone, and a considerable vacuity, increasing in width from the apex to the base of the triangle; these two surfaces were now gradually approximated, and as they approached each other, the leg, which was bent at right angles with the thigh, was extended; union between the bony surfaces took place, and, as it progressed, the limb was placed in a position occasioning the least deformity and inconvenience to the patient, and enabling him to use it with facility, for all the purposes of locomotion.

We do not attempt here an accurate description of the operation, but must refer the Fellows to the American Journal of Medical Science, in which a full report of the case will be found.

A most ingenious operation for the cure of recto-vaginal fistula has also been devised by the same surgeon, within a short period, for an account of which we must refer to the same Journal.

BIBLIOGRAPHICAL NOTICES.

Reports, &c. on Insane Asylums.

We have received interesting and valuable reports from some of the excellent establishments for the Insane in this country; and by the kindness of a philanthropic friend, who has recently visited England, we have been favoured with the excellent work of Jacobi and the Annual Reports of some of the Lunatic Asylums of Great Britain; each of which merits a passing notice.

We have often had occasion to remark—in the pages of this Journal and elsewhere—on the signal success which has attended the skilful and benevolent exertions of those under whose direction different insane institutions of our country are happily placed, and although doubt may exist in regard to some of the statistical details that have been laid before the public from time to time by too enthusiastic superintendents, the number, capable of being restored to reason, when placed at an early period under appropriate treatment, is so considerable, that our ancestors—a hundred years ago—if permitted to revisit this earth—would be compelled to esteem the statements absolutely incredible.

The first report to which we shall draw attention, is that of the ***Pennsylvania Hospital for the Insane,***[1] which is drawn up by the able Physician of the Institution, Dr. Kirkbride. It is a part of the city Pennsylvania Hospital, and is a noble establishment, erected on the western side of the Schuylkill for the reception of the Insane exclusively. The Report before us contains a detailed account of the operations of the new hospital during the year 1841; and to it—as being the first Report—is prefixed a short sketch of its history, buildings, and organisation. Of the latter we can only say, that they are admirably adapted for the purpose, and personal observation enables us to depose to the excellence of the medical and economical management. A beautiful view of this capacious and imposing structure is prefixed to the Report.

The number of patients admitted during the year was 176; of these there were discharged or died 61, and 115 remain.

Our space will not permit us to do more than extract Dr. Kirkbride's judicious remarks on the interesting subject of "Restraint" in the treatment of patients.

> Although our improved accommodations, and increased facilities for controlling the Insane, have enabled us, in many cases, to dispense with means of restraint that had previously been deemed necessary,—it is a pleasant reflection, that none but those of the mildest character have for a long period been employed in the Pennsylvania Hospital.
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> The year 1792, which witnessed the noble labours of Pinel, in striking off the chains of the maniac, and abolishing the abuses which existed in the French asylums,—was also the period at which members of the Society of Friends in England, united in establishing the "Retreat" at York, which has since been so justly distinguished, and from which, soon after its foundation, emanated a code of *moral* treatment, which even at this day can hardly be surpassed.
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> From the active interest felt in the Pennsylvania Hospital, by members of the same religious body—the mild and rational system pursued at the Retreat was soon adopted in the former institution,—long indeed before a reform was more than thought of, in many of the establishments of a similar kind in Great Britain.
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> It is on this account that we are not able to present such a striking picture of abuses corrected, and of reforms introduced, as have, in other places, within a few years, been brought before the notice of the public. In Pennsylvania, during a long period, these abuses, and the imposition of violent and uncalled for means of restraint, have been confined to the jails and alms-houses of the Commonwealth; and their existence, even there, has exacted from the Legislature a provision which, it is to be hoped, will ere long place all the poor, and the so called criminal insane, in accommodations of a superior order, and where only the most enlightened treatment will be pursued.
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> Simple seclusion in chambers properly secured, has been resorted to during the past year, in by far the greater number of cases that have appeared to require restraint of any kind. In others, leather wristbands, secured by a belt around the body, or mittens of the same material, or of canvass, have been employed, in rare cases, with a soft band about the ancles, and two patients have occasionally been kept on their beds with much advantage, by an apparatus also of leather, but admitting of much freedom of motion.
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> The so-called "tranquilising chair" has not been seen in our wards, nor

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[1] Report of the Pennsylvania Hospital for the Insane, for the year 1841, with a Sketch of its History, Buildings, and Organisation. By Thomas S. Kirkbride, M. D., Physician to the Institution. 8vo. pp. 46. Philadelphia, 1841.

> is the muff or strait-jacket among our regular means of restraint. The latter contrivance was used in two cases—only because in our anxiety to prevent a dependence upon apparatus for restraining violent patients—we had little sent from the old Hospital; and as it happened, at that time, there was nothing but the jacket that could be used for these individuals.
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> With the exceptions just indicated, no species of personal restraint has been resorted to, but those previously mentioned—and of these the use has been comparatively rare. For nearly three months after opening the house, not an article for restraint was used in the Hospital. We have frequently, during a whole fortnight, had a family of more than one hundred patients, without any kind of restraint upon the person of a single individual—not more than two or three confined to their rooms, and not more than half a dozen who were not able to take their meals in the dining rooms, at tables regularly furnished with crockery, knives, forks, and glasses.
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> From this freedom of action, and from these indulgences, we have found nothing but advantage, and encouragement to promote still less dependence upon restraining apparatus, as a means of controlling the Insane. To save the attendants trouble or labour is never admitted as a reason for its application,—the positive benefit of the patient is the only one, that is sound or justifiable, except under very peculiar circumstances.
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> We allow restraint to be allowed, only, by order of one of the physicians —and even the seclusion of a patient is to be promptly reported.
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> We have not dispensed with all restraining apparatus, because, under some circumstances, mild means of the kind are much less annoying to the patient, and effect the object in view with less irritation and more certainty, than the constant presence of even the best instructed attendants.
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> The great objection to the employment of restraint, and the positive injury produced by it, does not come so much from its application, as from its abuse, by being too long continued. Restraint or simple seclusion may be required for a week or a day, or it is possible that a single hour will be more beneficial than either;—and it ought never to be forgotten, that when either ceases to be useful, from that moment it becomes positively injurious.
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> It is to this too long continued seclusion and restraint, we fear, that we are to attribute the large number of chronic patients that are met with, totally careless of their persons, and with habits the most disgusting.
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> In this institution we have found upon releasing patients, whose hands had been in muffs for months or years, that they became less careless of their persons—improved in their general behaviour, and more cleanly in their habits. Two patients who had been chained in distant countries, have never required restraint of any kind; several who were represented as dangerous have regularly gone to the table, and used knives, forks, and glasses, without accident of any kind; and constant attention, night and day, has nearly cured some of the bad habits which had been of such long continuance as almost to preclude the hope of amendment.—p. 36.

The Report is drawn up with great care and commendable caution, and although Dr. Kirkbride dwells properly on the importance of the Insane being placed as early as possible under appropriate management, there is no attempt, by plausible statistics, to establish an astounding *per centage* of cures. There is reason, indeed, to believe, that these statistical evidences, so often afforded, are fallacious when closely inquired into, and that it must always be a matter of difficulty to fix upon the exact ratio of recoveries. Patients are detained in most institutions only so long as their friends desire, and are often withdrawn before the question of curability can be settled. A most erroneous inference might, therefore, be deduced from a simple inspection of the numerical statements of admissions and discharges. This has been properly animadverted upon by Dr. Kirkbride, and also, we are informed—

for, by some accident, the Report of the past year has not reached us—by Dr. Bell, the superintendent of the Charlestown, Mass. Institution for the Insane.

The Report of the Trustees of the *State Lunatic Asylum of New York*[1] is especially valuable, as containing a brief account of the various Insane establishments in the United States, and the views of their medical officers in regard to treatment, &c. Comprised in replies to lettersad dressed to them by the Trustees of the New York Asylum.

The document before us contains in addition to a short and sensible Report of the Board of Trustees—'A system of rules and regulations proposed for the State Asylum at Utica, 1842,' at the head of which they place the excellent remark of Jacobi, as a motto:—"*The whole system of moral treatment of the Insane may be summed up in two words,* KINDNESS and EMPLOYMENT." To this are appended statistical tables of the number of Insane in the United States, and in the State of New York, especially. The appendix, which forms more than two thirds of the document, is chiefly formed of the description of the chief asylums in the United States before referred to.

The Report is a useful addition to the library for future reference in regard to the condition of the chief lunatic asylums of the country, and the existing views in regard to the management of this unfortunate but interesting class of our population.

The Reports of Dr. Woodward, and of the excellent Institution of which he is the superintendant,[2] have done much to awaken attention in this country to the importance of a better management of the Insane, and to the erroneous notions which at one time—and even at a very recent period—prevailed in regard to them. The present Report exhibits all the ardour and enthusiasm that characterise its predecessors, and is an important contribution to the medical history of Insanity.

In the course of the past year, there were in the Hospital 399 patients; at the commencement of the year, 236, admitted in the course of the year, 163; remained at the end of the year, 232: of these last, 33 were cases of less duration than one year, and 199 of longer standing. Of 167 cases, discharged from the Hospital during the year, 68 were cases of less duration than one year; 62 recovered; 2 improved, and 4 died. Of 99 discharged, which were of longer duration than one year, 20 recovered, 34 improved; 37 were discharged as harmless and for want of room, and 8 died.

The Report of the County Lunatic Asylum at Hanwell, Middlesex, England,[3] comprises the Report of the skilful and benevolent physician—Dr. Conolly—who has the medical charge of it. Like the Reports of our own excellent institutions, it contains tables of the causes, &c. of the malady in the different patients under treatment, of whom 213 were admitted in the year ending September 30, 1840.

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[1] State of New York, No. 20. In Senate, Jan. 12, 1842. Report of the Trustees of the State Lunatic Asylum, with the documents accompanying the same, pursuant to the Act of the Legislature, passed May 16, 1841. 8vo. pp. 233. Albany, 1842.

[2] Ninth Annual Report of the Trustees of the State Lunatic Hospital at Worcester, Dec. 1841. 8vo. pp. 102. Boston, 1842.

[3] The Fifty-fifth Report of the Visiting Justices of the County Lunatic Asylum at Hanwell. Small 8vo. pp. 123. London, 1840.

The second part comprises the views of the superintendant as to the general management of the Insane, which are the result of enlarged observation and rare philanthropy. Dr. Conolly is well known as the energetic advocate of the system of non-restraint.

To this excellent charity is attached the "Queen Adelaide Fund,"[1] which was instituted with the view of assisting those who are discharged from the Institution cured, and whose condition is generally, under such circumstances, in the highest degree destitute. From the Report of a Committee now before us, it appears, that in the year 1840, the stock of this fund amounted to 4000 pounds.

The Report by Mr. Tuke, of the Retreat near York, England,[2] is chiefly of a business character. It contains, however, some tables of the admissions, recoveries, &c. since the time of its institution. The average number of Insane residents during the year 1840–41, was 91.3. The average of recoveries per cent. of the admissions from 1796 to 1841, is estimated at 50.35, the mean annual mortality, at 4.60 per cent.

The work of Dr. Jacobi[3] is excellent, and ought to be in the hands of every one who is concerned directly or indirectly in the management of the Insane. We were already familiar with the author's excellent article, *Irrenanstalten* in the 19th vol. of the *Encyclopädisches Wörterbuch, der medicinischen Wissenschaften.* (s. 62. Berlin, 1839,) and are glad to observe his views are expanded in the work before us.

The introductory observations by Mr. Tuke are likewise full of interest.

Bell on Regimen and Longevity.[4]

The author of the volume before us has been long known as a writer on the important subject of Hygiène; and most of his adopted views, we apprehend, have already met with the support of his professional brethren. On one subject only, many may be disposed to decline accompanying him so far as he goes—we mean the temperance cause—which we think he not only at this time, but always has been, disposed to push to ultraism. We may be in error, but it appears to us that the great cause which Dr. Bell—and every philanthropist must be with him—has at heart, is injured by this course; and that there is more danger from the effort to prove too much, than from leaving the argument even to a certain degree imperfect.

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[1] A List of the Subscribers to the Queen Adelaide Fund, for the Relief of the Destitute Insane on their Discharge from the Hanwell Lunatic Asylum, &c. &c. Small 8vo. pp. 28. London, 1840.

[2] State of an Institution near York, called the Retreat, for Persons afflicted with Disorders of the Mind. 12mo. pp. 16. York, 1841.

[3] On the Construction and Management of Hospitals for the Insane; with a Particular Notice of the Institution at Siegburg. By Dr. Maximilian Jacobi, translated by John Kitching. With Introductory Observations, &c. By Samuel Tuke. 8vo pp. 300. London, 1841.

[4] On Regimen and Longevity: comprising Materia Alimentaria, National Dietetic Usages, and the Influence of Civilization on Health and the Duration of Life. By John Bell, M. D., Lecturer on Materia Medica, Fellow of the College of Physicians of Philadelphia, Member of the American Philosophical Society, &c. &c. 12mo. pp. 424. Philadelphia, 1842.

Of the moral and physical evils resulting from the *abuse* of alcoholic drinks no one can be more convinced than ourselves; but we have yet to be satisfied, that their prudent use must always be injurious. Dr. Bell affirms that they are not necessary for health; but the same may be said of numerous other articles of the materia alimentaria. In some of their forms, they certainly add to man's pleasure and enjoyments, and hence we esteem it but *natural* that he should have recourse to them under prudential restrictions, and believe that they can only be injurious when indulged in too copiously. The argument, that they are necessarily excitant, is not worth much; for we believe that the digestive function is better executed, and the whole frame more perfectly nourished, under occasional excitement—provided always that excitement be within due limits—than when all is carried on monotonously. Hence, change of diet becomes indispensable to plenary health, and is admitted to be so by all physiologists; thus acting in a manner analogous to vicissitudes of climate, which—when within certain limits—are, doubtless, we think, necessary for plenary mental and corporeal development.

Dr. Bell is, however, rigorously opposed to alcohol in every shape. Thus:

> "Nobody believes, that their dilution [opium and quinine] or mode of combination causes any specific change in their properties, or that any modification of this kind will fit them for daily and habitual use by persons in health. It is reserved for the friends of alcohol to advance an exceptional plea in its favour, by an attempt to persuade us, that what in its purity and strength is a violent poison, becomes, by dilution and mixture, a safe and healthful beverage. The time was, still is in the opinion of many, when a dilution of alcohol, by the addition of an equal quantity of water and a slight flavouring with some essential oil, as that of barley, made it quite safe and proper. Now, however, in the opinion of an immense number of persons, this degree and fashion of dilution, being that in which distilled liquors are generally manufactured, does not prevent alcohol from poisoning the frame and perverting all the faculties of the mind, as poisons generally do. Whiskey and brandy and gin and rum drinkers and sellers are getting out of favour, and for stronger reasons than ever yet brought a class into disrepute. But they leave behind them a large and influential body, who, whilst disclaiming against any connection with or sympathy for them, hold very much to the same dietetic observances, by making use of the same intoxicating and poisonous element, only in smaller proportions and somewhat differently combined. These persons abjure alcohol in the proportion of 50 or even 45 per cent., as it comes in the shape of ardent spirits or distilled liquors, but they battle stoutly for the proportion of 25 down to 10 per cent. in the shape of wines. There is yet a third set at their heels, or the moderately alcoholic, who come in as plain, practical farmers, or honest manufacturers and labourers, and who quietly assure us, that they will be content with alcohol in drinks at the low rate of from 9 to 1½ per cent., in the shape of cider and beer.
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> "All these three divisions are, however, in fact, arrayed in the same cause, and adopt the same banner, though with different devices; and they resemble much more different divisions of the same army than opposing forces. They all procure alcohol from the same source, and by the same primary process, viz. of fermentation. The manufacturers of ardent spirits have contrived to procure it in greater abundance by distillation from fermenting mixtures; but, in requital, they give back a portion to the makers of wines, in order to strengthen these latter liquors, and adapt them to the still pre-

vailing tastes for something rather more potentially alcoholic. Between the wine-press and the still there is then a close and almost inseparable connection, and so long as the former is in active operation, the latter will never be idle. From wine is educed spirits of wine, as alcohol is often called. Of the 924 millions of gallons of wine made in France, it will be remembered, that more than a seventh or 141 millions were manufactured into brandy (p. 223); a portion of which is used in giving more body to the wine that is reserved for exportation. Nor is French brandy alone used for this purpose. Mr. McCulloch, in speaking of the Catalonian wines, tells us that the exports from Barcelona to Cuba, are 12,000 pipes of wine and 3000 pipes of brandy; to South America, 16,000 pipes of wine and 6000 pipes of brandy; to the North of Europe, 2000 pipes of wine and 2000 pipes of brandy. So that for every three pipes of wine, there goes with it more than a pipe of brandy; both of them the product of the juice of the grape. The author just cited, adds: ·A good deal of brandy is sent to Cadiz and Cette; most part of the former finds its way into the wine vaults of Xeres; and the latter being conveyed by the canal of Languedoc to the Garonne, is used in the preparation of the wines of Bordeaux."

And again: "The wine-drinker in Great Britain and the United States goes beyond the grog-drinker: the latter takes simply spirits and water, whereas he takes spirits and wine. By the standard of temperance, it will not be difficult to decide their respective merits; on the score of health, I would rather run the chances of the drinker of spirits and water, than of him who drinks spirits and wine. The probable longevity is in favour, as far as my observation and reading extend, of the grog-drinker. But from the imitation of either, we ought all devoutly to exclaim, 'Good Lord deliver us!'"—p. 348.

The author has, at some trouble, compiled interesting details of various national dietetic usages, and of the alimentary value of different articles of diet, and has cited statistical proofs—which will astonish the majority of our readers—that the people of France in their use of wine, cider, beer and brandy for drink consume, per individual, more than the people of Great Britain and Ireland per individual. We must refer, however, to the volume before us for the details on this subject.

In the haste of preparing the work for the press—which we know was urgent—some errors have escaped the author, such as "algæ or *seed* weeds" —[1] *blanc mange* for *blancmanger*, *Handb. d'Chem*, *Compestus Med. Ther.* for *Conspectus Med. Ther.*, *Rukman* for *Rickman*, *pro rota* for *pro ratâ*, &c.;—but these are trifles. The work contains a large mass of useful information, and we are happy in being able to recommend it to the perusal not only of the profession but of the laity.

Professor Wright's Introductory Lecture.[2]

There is much good ethical instruction contained in this lecture, conveyed, however, in a style which is much too florid and familiar to our taste, although such may not be the sentiment of those for whose information it was penned.

We apprehend, that the following remarks apply to other meridians than the one in which they were delivered.

"There is another subject of some delicacy, to which I cannot fail to give a passing notice. A young man about to leave his home and his friends, in search of a situation favourable for practice, is often supplied with more gratuitous advice than he can turn to good account;—and much of this is given by those, whose judgments are too often controlled, by the honest, but mistaken zeal of their hearts. 'When you have selected your location, join our church, and secure its patronage,' is the subject of every-day council; and it is not often passed by unheeded, as many act upon the principle, that professions of goodness supply defects of knowledge. But, gentlemen, a declaration of wisdom upon important subjects of which you are ignorant, is one sin; hypocrisy in religion, another; and when combined in the same individual, unspeakably detestable is his character.

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[1] What does the author mean when he affirms that the faculties of the drinker of malt liquors "are dull and sodden?"

[2] A Lecture delivered to the Students of the Medical College of Ohio, at the opening of the Session, 1841-42. By M. B. Wright, M.D., Professor, &c. 12mo. pp. 14. Cincinnati, 1841.

"Do not misinterpret my meaning,—do not understand me as objecting to church-membership, or to your becoming exemplary christians. Would to God that every one of us were true disciples of that best of all Physicians! —that when we had failed to impart healthful action to the mortal body, we might aid the spirit in its joyful flight to eternity!

"Happy is the man who can discern the beauties of pure religion—who feels in his heart its persuasive, soothing influence, and who reposes in safety upon its promises and hopes. There is nothing which more effectually controls the impetuous nature of man—nothing better calculated to develope and strengthen his affections—nothing, in a word, more efficient in making him what he should be. The immortal spirit, like Noah's dove, flies everywhere, without being able to find one spot upon which to rest its weary wing, until it returns to the place whence it issued.

"Great, I say, is the happiness of the true christian—but, doubly cursed will he be, who aims to counterfeit the very essence of his Maker, for the sake of traffic. And I would say to those who encourage such conduct, look well to your responsibilities. While you are offering inducements to the physician, to become at heart and in practice a hypocrite, you are plunging your javelin deeper and deeper into the vitals of undefiled religion. Every day's observation establishes the fact, that empty professors have filled more hearts with scepticism, than the most hardened villains that ever cursed God and died! Would any man dare, whilst administering the holy sacrament, to say, in words 'Eat this, for it is emblematical of the broken body of your Saviour—drink this, for it is his blood—eat and drink, that you may the more effectually impose upon your fellow men?' No, he dare not. His tongue would become paralysed, and withered in the effort; and yet, it is to be feared, he says this too often in effect."

Forry on the Climate of the United States.[1]

This is an excellent contribution towards the medical statistics of this country—based chiefly—as the author states in the title—on the records of the medical officers of the army. The work is divided into two parts,—the *first* comprising "Researches in Elucidation of the Laws of Climate in general, and especially the Climatic Features peculiar to the Region of the United States;" and the *second* embracing "Researches elucidating the Endemic Influences peculiar to the Systems of Climate developed in Part 1st."

With most of the author's views we entirely accord; indeed, the work affords evidence, that our own inquiries have received a portion of Dr. Forry's attention. On the subject, however, of the vegetable origin of malaria, we are compelled to differ from him: his facts and arguments on this subject are not, indeed, more conclusive than those of his predecessors, whilst he adduces, we think, sufficient testimony against the soundness of his own views. We do not, however, on this account, the less recommend Dr. Forry's labours to the notice of our professional brethren. His work is unquestionably one of the most interesting productions that have appeared on this interesting subject.

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[1] The Climate of the United States and its Endemic Influences: based chiefly on the Records of the Medical Department and Adjutant-General's Office, United States Army. By Samuel Forry, M. D. 8vo. pp. 380.

MISCELLANEOUS NOTICES.

Jefferson Medical College.—The exercises before the Graduating Class of the Jefferson Medical School, were held on the 10th of March at the Musical Fund Hall. The Valedictory—which was able, impressive, and appropriate—was delivered by Professor Huston. The degree of Doctor of Medicine was conferred on the following gentlemen.

* These gentlemen were already graduates of Dartmouth College, N. H.

Names.	*Resid.*	*Subjects of Thesis.*
Horace D. Ashton,	Va.	Cynanche trachealis.
Otis Ayer,*	N. H.	Cirsocele.
Elisha Brown,	Ohio.	Acute articular rheumatism.
Wm. M. Byars,	Ky.	Poisoning by corrosive sublimate.
Robert S. Beazley,	Va.	Hepatitis.
James Bringhurst,	Del.	Animal magnetism.
Wm. S. Bishop,	Pa.	Bilious pneumonia.
Agrippa N. Bell,	Va.	Spermatorrhœa.
James D. Browder,	Va.	Necrosis.
Wm. T. Craige,	Pa.	Chorea.
Wm. E. Cooke,	N. Scotia.	Typhus fever.
Frederick Crowley,	Pa.	Diaphoretics.
James W. Daily,	Ohio.	Intermittent fever.
Welding F. Dennis,	Pa.	Bronchocele.
Richard H. D. Ewell,	Tenn.	Hysteria.
James E. Ford,	Va.	Endocarditis.
Charles Huston,	Pa.	The skin.
Sterne Hotchkiss,	Ct.	Acute mucous colitis.
H. H. Humphrey,	Pa.	Homœopathy.
David H. Houston,	Del.	Miasmata.
Clement R. Harris,	Va.	Cynanche trachealis.
Alfred C. Holt,	Miss.	Morbid conditions of the great sympathetic nerve.
John W. Irby,	Va.	Venesection.
Henry W. Johnson,	Pa.	Obstetrics.
George C. Jones,	Del.	Puerperal fever.
Oliver W. Kellog,	Ct.	Spinal irritation.
Charles L. Lyon,	Pa.	Gastritis acuta.
James W. Lisle,	Pa.	Diphtheritic membrane of croup.
John G. Logue,	Pa.	Scarlatina.
John H. Miller,	Md.	Acute bronchitis.
Charles May,	Va.	Compression of the brain.
Andrew S. McMurray,	Pa.	Qualifications and duties of a physician.
Gerrard F. Mason,	Va.	Physiology of the liver.
Robert McElrath,	Pa.	Scarlet fever.
John M. Nunn,	Va.	Parturition.
Pat. Moffit O'Brien,	Ireland.	Proximate causes of inflammation.
Stephen Proctor,	Miss.	Magnolia grandiflora.
Wm. P. Rothrock,	Pa.	Mucous enteritis.
Benjamin F. Rea,	Ga.	Iced water in pyrexia, phlegmasia, &c.

Names.	*Resid.*	*Subjects of Thesis.*
John K. Robins,	Pa.	Chronic endogastritis.
Elijah B. Richman,	N. J.	Mania.
Ossian Sumner,	Ct.	Emetics.
Slater B. Stubbs,	Pa.	Intermittent fever.
Jackson Schaeffer,	Pa.	Dysmenorrhœa.
Michael Steck,	Pa.	Practical anatomy.
Benjamin Smith,	Pa.	Amenorrhœa.
Wm. Scott,	Pa.	Variola.
Wm. W. Sweat,	Me.	Surgery and Surgical practice.
John Schrack, Jr.,	Pa.	Vaccina.
Thomas W. Shelton,	Va.	Tight lacing.
Peter L. B. Stickney,	Pa.	Medical investigation.
David T. Trites,	Pa.	Blood, and its diseases.
Chas. F. Williams,	Ala.	Cynanche trachealis.
John H. Weir,	Pa.	Pertussis.
Gillet F. Watson,	Va.	Inflammation.
Chase Wiggins,*	N. H.	Rheumatism.
George B. Weiser,	Pa.	Circulation of the blood.
Henry M. Whitaker,	Ky.	Blood-letting.
Robert S. Woddrop,	S. C.	Strabismus.

The honorary degree of Doctor of Medicine was conferred on Joseph Frazer, of Penn., and John Cooper, of Poughkeepsie, N. Y.—Total, 61.

Transylvania Medical School.—The Annual Announcement of the Medical Department of Transylvania University gives the names of 271 students; whereof there were from Kentucky, 116; Tennessee, 33; Alabama, 30; South Carolina, 23; Georgia, 11; Missouri, 11; Mississippi, 9; Indiana, 9; Ohio, 8; Virginia, 7; Illinois, 5; Arkansas, 2; Pennsylvania, 2; Louisiana, 1; North Carolina, 1; Delaware, 1; New York, 1; Michigan, 1.

At the recent Commencement the degree of Doctor of Medicine was conferred on 55 gentlemen; and the honorary degree of M.D., on 2.

It would seem, that the class of the last session was more numerous than any of its predecessors.

Medical Society of Virginia.—We have received the Constitution and By-laws of the Medical Society of Virginia, revised and amended in January, 1842. The officers for the year 1842, are Robert W. Haxall, M.D., President; John A. Cunningham, M.D., Sr. Vice-President; Socrates Maupin, M.D., Jr. Vice President; Francis B. Watkins, M.D., Recording Secretary; Richard Cary Ambler, M.D., Cor. Secretary; James Bolton, M.D., Treasurer, and George G. Minor, M.D., Librarian.

Washington University of Baltimore.—Professor Baxley.

At a meeting of the Faculty of the Washington University, held recently, Dr. H. W. Baxley was unanimously elected Professor of Surgery and Surgical Anatomy, in place of Dr. Dunbar, resigned.

We have already referred more than once in the pages of the "*Intelligencer*" to this gentleman's qualifications as an anatomist and a teacher, and we doubt not, that the credit, which he has already acquired in the latter capacity, will be largely extended in his new sphere for observation and exertion.

Louisville Medical Institute.—The Annual Catalogue of this Institution contains the names of 262 students: of whom there were—from Kentucky, 89; Tennessee, 81; Alabama, 30; Mississippi, 20; Ohio, 14; Indiana, 10; Illinois, 4; Missouri, 3; Louisiana, 3; Virginia, 2; Georgia, 2; Pennsylvania, 1; New York, 1; New Jersey, 1, and Texas, 1.

The degree of Doctor of Medicine was conferred on 53 gentlemen; and the honorary degree on 4.

Physiological Temperance Society of the Medical Institute of Louisville.—We learn from the "proceedings" of this new society, with which we have been favoured, that on the 23d of December, 1841, Professor Drake presented to the Medical Class, a Constitution, which was immediately subscribed by seventy students, and subsequently by sixty-seven others, "making six more than half the class." One of the objects of its establishment is to investigate the causes, consequences, and remedies of intemperance in the use of alcoholic drinks and other narcotic stimulants; and every member binds himself to refrain from intoxicating beverages for five years after subscribing the Constitution.

The Report of the Committee, appointed to report how far the promotion of temperance should be regarded as a professional duty, is especially commendable for the avoidance of ultra sentiments, which—as we have elsewhere remarked—are apt to defeat the object of their authors. Professor Drake was the chairman of the committee.

Amongst the honorary members proposed by Professors Drake and Yandell, we notice Dr. Bell as the representative of Pennsylvania, who has certainly been a most energetic supporter of the great cause.

We would refer the members of this society to our observations on the treatment of delirium tremens, by the eclectic method on which we have expatiated elsewhere.[1] It is a subject which falls properly within the province of a society so constituted, and involves not only physical but moral considerations of deep interest.

Dr. Bowditch on the Trichina Spiralis.—An interesting account of the Trichina spiralis a parasitic *animalculum*, (where does Dr. Bowditch get the word *animalculæ?*) is contained in a recent number of the Boston Medical and Surgical Journal, (March 30, 1842,) with drawings of the animalcule in and out of the containing cyst.

After detailing the case of the patient, Dr. Bowditch thus refers to the appearances observed on dissection; premising, that this is the first time, so far as he knows, that the animalcule has been noticed in this country.

"*Appearance of the Affected Cellular Membrane.*—The muscles and cellular membrane underneath them seemed literally covered with myriads of minute white lines, looking at first sight like the ova of the common fly upon decaying animal matter. The bodies seemed to be attached rather to the cellular membrane running among the fibres, than to the muscular tissue itself. They lay parallel to the course of these fibres. They had no motion, and to the naked eye looked like simple lines. I attempted to approximate to the number which probably existed in the body, supposing the other voluntary muscles were as much affected by them as those mentioned above (vide autopsy.) I and another individual counted the number contained in a superfices of a quarter of an inch square. Both of us counted many more than fifty. Calling, however, this number the mean for every quarter of an inch over the trunk of the body, and allowing ten layers only (which is a very small number, when we consider that not the thinnest lamina could be removed from a muscle without exposing new specimens of the same morbid phenomena) from the surface to the bones of thorax or peritoneum, we shall have as follows: 50×16=800=number contained in a square inch; 800×10=8000=number contained in solid mass an inch square and ten layers deep. Supposing the height of the adult trunk to be fifteen inches, and the circumference thirty-two inches, we have as follows: 15×32×800×10=3,840,000, contained in the parietes of the trunk of the body. Supposing (what is still a moderate estimate) that the extremities taken together contain as many more, we have at least 7,680,000 of these minute bodies contained within the skin of this patient. Our wonder augments when we find that each of these bodies contains a minute parasitic animal!

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[1] Practice of Medicine, p. 342. Philadelphia, 1842.

"*Microscopic Observations.*—By the use of one of Chevalier's very excellent achromatic instruments, I observed as follows:—They seemed regular oval-shaped cysts, very translucent in the centre, opaque at both extremities. Upon examining very minutely, something very indefinite and circular was seen lying in the cyst. At first I was disposed to believe that this spiral was an alimentary canal, but subsequent investigation proved otherwise.—(Vide figure 1.) Upon using a higher magnifying power, we saw that while most of the bodies contained evidently a regular rounded worm-like body, others seemed opaque and yet very regular, whilst in one case the cyst had been evidently broken, and the creature had escaped from its interior.—(Vide figure 2.) In one case I observed two animals in one cyst. Dr. Farre has seen three, but this is very rare.

"I attempted to learn the dimensions of the cyst. They were as follows:—Length, about one sixtieth part of an inch; breadth, one hundred and twentieth. Unfortunately I had no micrometer when the figures of the cyst with the animal lying by its side presented themselves.

"My examination convinced me that there was a living and moving worm (looking like a lumbricus) contained in a cyst of very delicate texture, and containing besides its living inhabitant a gelatinous mass. It was evidently alive on Saturday evening (patient having died on Tuesday, and the autopsy having been made on Wednesday). Most were very quiet, and but two were seen to move by several observers. At times the whole body stirred, causing an enlargement and diminution of the spiral shape. Usually only one extremity, however, was slightly but very distinctly agitated. When there was most motion, the gelatinous-like substance already mentioned was moved likewise. The length of time that life continued after removal from the body of the patient, seems curious to me. Owen has mentioned[1] the fact of life having been discovered two weeks after the death of the subject in whom they were found. I watched with great care to see if there was any internal motion of the worm itself, of an intestinal or circulatory nature, but I saw none. One of my assistants thought that he did discover something slight of the kind, but I feared at the time he was in error. I endeavoured likewise to decide upon the internal structure, but I was baffled in a great measure. I could see evidently parietes of uniform thickness through the whole length of body, and perhaps they were about one-tenth as thick as the whole body, while a mass of some regularity filled the interior."—pp. 121, 122.

Dr. Bowditch concludes his communication with a history of the researches on the nature of the Trichina that have thus far been made.

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[1] Zoological Transactions, 1835. Todd's Cyclopædia of Anatomy and Physiology, Entozoa. Or Medical Gazette, Vol. XV., p. 125, for analysis of the same paper.

On Italy as a residence for the Consumptive, by Dr. Mott of New York.

[The following remarks by Dr. Mott in his "Travels" contain but little that is new, but they confirm in some respects the views that are now almost unanimously entertained on the subject, and which we have urged elsewhere, (Elements of Hygiène, and Practice of Medicine.) The influences that are so beneficial in incipient phthisis are certainly not owing to mere equability of climate; for we know, that in countries in which the thermometer range is restricted tuberculosis is by no means uncommon. A climate, which is liable to vicissitudes, provided these are within certain limits, and whose general temperature is such, that the valetudinarian can take exercise in the open air every day during the winter, is the great desideratum. Doubtless, such exercise must not be carried to the extent of inducing fatigue, or undue excitement; but if these results be avoided, the thorough revulsion, caused by a change of every influence surrounding the individual is a revellent agency of the greatest importance, and after all it is to revellents that we have to trust entirely in these interesting cases.]

"It is a great error to suppose that Italy, with all its fascinations, is suited to the *pulmonary* invalid. The constant anxiety he feels to visit and examine the antiquities of a country that are exhaustless in variety and attractive beauty, and the intense excitement they occasion when seen, as well as the exposure and fatigue necessarily incurred in visiting them, are, from my own personal knowledge, often injurious to the health of such patients. It must, upon the slightest reflection, occur to the mind of every medical man, that hemorrhage from the lungs will be frequently brought on in such patients as we have described. A fact which we have positively known in that country, and which has aggravated the malady and expedited the fatal issue. Even where there is only a strong predisposition to an affection of the lungs, and no incipient disease, the symptoms may thereby become more speedily matured, and positive and fatal mischief be induced. But more especially where actual disorganisation exists, the exciting causes before mentioned will be attended with pernicious consequences.

"If a pulmonary [?] invalid from a colder country will travel in Italy without incurring exposure to the excitements we have mentioned, he will find its mild climate admirably suited to the mitigation of his malady; far more so, as we have already explained, than to the native Italian afflicted with these complaints.

"In the *great* class of nervous affections, where much debility exists, but unaccompanied with organic mischief, and especially when unconnected with pulmonary disease, the peculiar attractions that are found in Italy are signally remedial and bracing, and invigorating in their influence upon the general health, as we have already remarked, by addressing themselves to the moral and intellectual faculties. Such an invalid may reside for any length of time in any of the delightful cities of Italy, with great profit to his health. But far otherwise with the pulmonary man: he, in our opinion, ought to pursue a very different course. His rule should be, a constant change of place, and very little attention, much less close application to the diversified novelties that present themselves in his travels. The exercise to his body in this climate is far more important to him, than having his mind engaged in fatiguing excitements. Too much care cannot possibly be paid to this advice.

"As an illustration of the value of change of place for the pulmonary invalid, we may mention that the inhabitants of Lower Egypt, when threatened with disease of the lungs, resort to Upper Egypt, Nubia and Abyssinia for a change of climate, and we know with decided benefit. The inhabitants of Nubia and Abyssinia, on the other hand, when labouring under the same affections, come down to the lower or alluvial country with equal advantage.

"There has been much of romance in the pictures that have been drawn of the climate and advantages of Italy. Whatever may be the malady of the patient, he must be prepared to meet with inconvenience, which will constantly remind him of what he has lost by leaving home. Except in the capital cities, but few houses will be found with any accommodations that merit the name of what we Anglo-Americans understand by the significant word comfort. Most of them, he will find to his sorrow, are not provided even with the necessaries of life. He must, too, often expect to encounter, after a long day's travel, meagre arrangements for fire to counteract the chill of the evening, and a cold stone floor, instead of a cheering carpet to tread upon, before he can reach his not less comfortless bed.

"I must here be permitted to protest against what I deem a reprehensible, if not cruel and wicked practice that some professional men fall into, of recommending or sanctioning, and sometimes even themselves urging the poor sufferer from pulmonary disease, after all the resources of our art have failed, to abandon his home, his family and friends, with the vain hope of recovering his health in a foreign land. The moment the disease appears to be confirmed, we have believed it to be our sacred duty to advise every patient to make himself as comfortable as possible in his own country, and within the immediate circle of his own family or relations, that he may partake, to the fullest extent, and up to the last sad moments of his life, of all the rational and soothing enjoyments of their sympathies, and all the luxuries of home, rather than die in a foreign land.

"We are aware, that nothing is more common than a fallacious and flattering hope, which a pulmonary invalid is prone to indulge in, and that the future is always painted in his imagination with the warm and glowing tints and rainbow hues of a bright and glorious dawn, even when the night-pall of death is drawing its curtains around, and the unconscious victim has reached even the dark confines of the grave. And however painful to the medical attendant to do or say that which shall chill or dampen the sanguine and delightful anticipations of recovery of his patient, he has but one course to pursue, which is, to do his duty."

Ileus cured by a Belladonna Enema. By Dr. Becker.[1] (*Gazette Médicale de Paris*, May 8th, 1841.)—A woman, 48 years of age, was suddenly seized with vomiting, pain in the bowels, and constipation. The vomiting became more and more fetid, and at last stercoraceous, and after five days' treatment was worse than ever. M. Becker then gave her an enema made with one drachm of the root of belladonna, which, within a very short time after its administration, put a stop to the pain and vomiting, and in half-an-hour brought away a stool containing much blood. After this, the woman gradually recovered. No narcotic effects were observed from the employment of the belladonna.

On the occurrence of Nephritis with Albuminous Urine in Infants. By Dr. Charcelay.[2] (*Gazette Médicale de Paris*, 25th September, 1841.)—Dr. Charcelay describes at length sixteen cases of a disease attended with œdema, and occurring in infants shortly after birth, which he attributes to nephritis. No particular symptoms are mentioned diagnostic of this affection, excepting the œdematous state of the body, and the urine being albuminous, as he calls it. The substance, however, which he designates albumen would appear not to be such as he mentions, that though a precipitate was occasioned by nitric acid, it was soluble in an excess of the same. The kidneys were found to be the seat of vascular engorgement, and were larger and redder than usual. A cretaceous looking matter, of a reddish-yellow colour, which he thought was lithic acid, was found in large quantity in the calices of the kidneys.

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[1] Edinb. Med. and Surg. Jour., Jan., 1842. p. 254.

[2] Ibid. p. 255.

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Art. I.—CASE OF CATALEPSY IN THE PARTURIENT FEMALE.

By J. L. Ludlow, M.D., Resident Physician, Philadelphia Hospital.

E. E. æt. 20—rather below the ordinary height, of good constitution, and a sanguineo-nervous temperament, was taken in labour with her third child, on the 19th of February. About a month previous to this time, upon experiencing some slight pains, resembling labour pains, a physician was sent for, who—after making the requisite examination *per vaginam*, and the pains becoming less frequent, and not so severe as when he arrived—ordered an anodyne injection and perfect rest; by which means the patient was soon enabled to go about the wards, although now and then complaining of transient pains, which, however, were not of a character sufficiently severe to require medical attention.

In the condition above mentioned, the patient remained until the date previously named, when I was called in. The pains, though slight, were regular in their returns, at intervals of 20 minutes. Upon making an examination *per vaginam*, the os uteri was very slightly dilated, though flabby and dilatable, and the neck of the womb appeared to the touch not sufficiently developed for the full time of utero-gestation. The labour advanced slowly though perfectly natural, until about 12 o'clock on the 20th, when I was summoned, in great haste, and found the patient labouring under a fit, in some respects strongly resembling catalepsy. The mouth was widely open, the neck and head thrown back, and the eyes, at first, firmly fixed upwards and backwards in the sockets, but afterwards rolling about in every direction, the patient being unable to fix them upon any object. The respiration and the pulse were perfectly natural, and the skin moist and healthy. The upper extremities, for a short time, could be placed in any position, the patient being unable to govern them. The lower extremities were not in the slightest degree affected. The consciousness of the woman remained perfect throughout, and when requested to exert herself in any manner, she attempted to do it, but in vain. During this interval of the fits she complained of heaviness about her head with tinnitus and giddiness.

I immediately opened a vein and took about 10 ozs. of blood, when it ceased flowing; applied sinapisms to the back of the neck and ears, and leeches to the temples; prescribed anodyne injections and foot-bath, and rubbed her throat with a stimulating liniment, deglutition being entirely suspended. Notwithstanding the remedies used, the fits continually recurred with every contraction of the uterus, which contractions were, however, now at longer intervals. At this time, I made a re-examination of the os uteri, but found it not more dilated than at my previous examinations. Labour appearing to advance slowly, and the parts being not in a state to favour its more rapid progress, a consultation was asked of Dr. Huston, the consulting accoucheur to the Hospital, who, after making an examination *per vaginam*, recommended the os uteri to be anointed with belladonna, and a draught of Mistur. Assafœtid. ℥ss. Morph. Sulph. gr 1-8., to be given every hour, and the Oleum Succini to be rubbed down the spine. After persevering in these remedies for some time, (the patient not being benefited, the fits recurring at the same intervals as before,) they were stopped, and the following mixture was prescribed:

℞ Tr. Valer. Ammon. ʒj.
Tr. Opii Acet. gtt. xlviij.
Camphor. gr. xxxvj.
Ext. Hyoscyam. gr. xij.
Sacch. Alb. et G. Acac. q. s.
Aquæ q. s. ut. ft. ℥vj. M.

A table-spoonful to be given every two hours.

After taking two table-spoonfuls of this mixture, the uterine contractions and the pains ceased; the dose was now diminished to a tea-spoonful, and the patient merely kept under its influence. While she took this medicine, (for she had to suspend its use, on account of a slight nausea, for a day, when the fits again returned,) she had no fits, but remained perfectly well, until the night of the 27th of February, when she was delivered of a boy well formed and healthy. The patient is herself doing perfectly well, there having been no sign of a fit during the delivery, or since.

It may be proper to remark, that during her previous labours, nothing unnatural had occurred; and her life had been exempt from any thing of the kind, until her present accouchement. During the whole of the period occupied in labour, her bowels were in an open state, and her urine passed freely.

J. L. Ludlow, M.D.

March 3, 1842.

Art. II.—OBSERVATIONS ON SOME OF THE SIGNS OF LIVE AND STILL-BIRTH, IN THEIR APPLICATIONS TO MEDICAL JURISPRUDENCE. By John B. Beck, M.D., Professor of Materia Medica and Medical Jurisprudence in the College of Physicians and Surgeons of the University of the State of New York.[1]

[The following observations are from one whose attention has been long and ably directed to a most important subject. They suggest great caution to the medical jurist who is called upon to pronounce in a case so full of moment to all concerned. To exhibit still more strongly the discriminating caution—the judicious doubt—that is demanded in such cases, we premise a summary of the results obtained by another excellent observer—Dr. Guy.[2]

" *Weight of the Lungs.*—1. The weight of the lungs of still-born children of the same age varies within wide limits; the chief causes of difference being the sex and the weight of the body.

"2. The weight of the lungs in mature still-born children is as follows: greatest weight, 1661; least weight, 340; average weight, 874.

"3. The weight of the lungs in mature still-born children of the male and female sex respectively is as follows: greatest weight, 1661, 1492; least weight, 360, 340; average weight, 950, 809.

"4. The weight of the lungs in children who have respired also varies within wide limits; the chief causes of difference, in addition to those which affect still-born children, being the degree and duration of respiration.

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[1] Transactions of the Medical Society of the State of New York. Vol. 5. Part 2.

[2] Edinb. Med. and Surg. Journ., Jan. 1842, p. 17.

"5. In children who have survived their birth one month or less, the highest recorded weight is 2440 grains; the lowest 432 grains; and the average 1072 grains.

"6. The weight of the lungs for males and females respectively, at the same ages, is as follows: greatest weight, 2440, 1745; least weight, 432, 479; average weight, 1121, 982.

"7. The weight of the lungs increases with the increasing perfection of the respiration, but is very slightly augmented by imperfect respiration.

"8. The weight of the lungs also increases with the duration of the respiration; but appears to be less when respiration has continued more than one hour and less than twelve, than when it has lasted less than one hour.

"9. The mean weight of the lungs in mature children who have lived one month or less exceeds the mean weight in mature still-born children, by somewhat less than one-fourth, the numbers being 574 and 1072.

"10. The average and extreme values drawn from small numbers of facts differ widely from each other, and cannot be depended upon for medico-legal purposes.

"11. The average values cannot be safely employed as standards of comparison, and the extreme values admit of very rare application.

"12. If the absolute weight of the lungs is employed as a test of respiration, the value obtained in an individual case ought to be compared with the average or extreme numbers obtained for the same weight of body.

"The following propositions have an important bearing on Ploucquet's Test.

"1. The weight of the lungs both before and after respiration increases with the weight of the body; but the proportion which the lungs bear to the body decreases as the weight of the body increases.

"2. For the same weight of body the weight of the lungs varies within wide limits, and *vice versâ*, for the same weight of lungs the weight of the body varies within wide limits. This variation is more considerable after respiration than before it.

"3. The weight of the body in still-born children is greater than in children born alive; the former exceeding the latter by nearly one-third.

"4. The weight of the lungs is subject to much greater variation than that of the body.

"5. The weight of the lungs is much greater in the male than in the female."

"*Ploucquet's Test.*—1. The proportion which the weight of the lungs bears to that of the body, like the absolute weight of the lungs, varies within wide limits; the proportion in mature still-born children being as follows: greatest proportion, 1 : 24; least proportion, 1 : 176; average proportion, 1 : 57.

"2. The proportion in males and females respectively is as follows; greatest proportion, 1 : 24, 1 : 36; least proportion, 1 : 176, 1 : 119; average proportion, 1 : 53, 1 : 63.

"3. In children who have survived their birth one month or less, the highest recorded proportion is 1 : 19; the lowest, 1 : 132; and the average, 1 : 38.

"4. The proportion for males and females respectively at the same age is as follows: greatest proportion, 1 : 19; least proportion, 1 : 132, 1 : 96; average proportion, 1 : 35, 1 : 43.

"5. The proportion which the lungs bear to the body increases with the increasing perfection of the respiration, but is very slightly augmented by imperfect respiration.

"6. The proportion also increases with the duration of the respiration, but appears to be less when respiration has continued more than one hour and less than twelve, than when it has lasted less than one hour.

"7. The average proportion in mature children who have lived one month or less, exceeds that in mature still-born children; the numbers being 1 : 57 before respiration; and 1 : 38 after respiration.

"8. The proportions calculated from a small number of facts differ widely from each other, and cannot be depended upon for medico-legal purposes.

"9. The average proportions cannot be safely employed as standards of comparison, and the extreme values, though more to be depended on than the highest and lowest weight of the lungs, are of very limited application.

"10. If the average or extreme proportions are employed as standards of comparison, the proportion obtained in any individual case must be compared with the average or extreme numbers calculated for the same weight of body."

"The observations," Dr. Guy concludes, "contained in the present essay lend strong confirmation to the unfavourable opinion expressed on a former occasion of the static lung tests as tests of respiration. Whether employed to distinguish respiration from non-respiration, or respiration from inflation they are alike insufficient, except in cases of extremely rare occurrence, where we can make use of the extreme values. On the supposition that the question of inflation has no place, the static lung tests are as unnecessary as they are useless; if we have proved that either respiration or inflation has taken place, they can only be employed with advantage in the extremely rare instances just alluded to, viz. where we can employ the extreme values. Hence, then, the proposition which concludes my first essay requires to be slightly modified, and will stand thus:—

"The static lung tests are utterly useless for all practical purposes, and ought not to be relied on in medico-legal inquiries, except in rare instances, where the extreme values can be employed."—Ed.]

In all cases of alleged child murder, one of the great questions to be established, is the fact of the child's having respired or not. As the signs by which this is to be determined are still the subject of much difference of opinion among medical jurists, it becomes important to enlarge our existing stock of knowledge, by the accumulation of new and repeated observations. With this view, I have embraced every opportunity that has been thrown in my way of examining the dead new-born subject. The following observations are founded upon the examination of ten such subjects, which I have been enabled to make through the kindness of some of my professional friends. To Dr. Wilson, formerly physician of the Bellevue Hospital, from which institution many of the subjects were furnished, I am particularly indebted. As the circumstances connected with the birth of each are known, no doubt or uncertainty can attach to the accuracy of the conclusions drawn from them.

Among the tests principally relied on to determine this question, the most important are the following:—1. The static test. 2. The hydrostatic test. 3. The state of the ductus arteriosus.

1. *The static test.* This test is founded on the fact, that the act of respiration causes an increase in the weight of the lungs. There are two forms in which this test has been applied. The first is by comparing the weight of the lungs with that of the body. This is commonly called Ploucquet's test. The second is that of taking the absolute weight of the lungs.

a. Ploucquet's test. This is so called from its having been originally suggested by Ploucquet. It is founded on the fact, that as soon as respiration takes place in a new-born infant, an additional quantity of blood penetrates the lungs, in consequence of which, these organs become heavier than anterior to respiration. As the weight of the body of the child cannot undergo any change, he suggested accordingly, that a comparison of the weight of the body of the child with the weight of its lungs, would furnish a test by which to determine whether it had respired or not. From the few observations which he made, he came to the conclusion that where respiration had not taken place, the proportion between the weight of the lungs and that of the body, was as 1 to 70; while on the other hand, where respiration had taken place, it was as 1 to 35; or in other words, that the weight of the lungs was doubled in consequence of respiration. A test so beautiful as this, and founded apparently upon principles so truly physiological, it was hoped, would aid, very materially, to solve this important question. Numerous experiments and observations were accordingly made to test its accuracy in actual practice; and the result has been, that while some appreciate it very highly, by others it is viewed as altogether uncertain. In the ten cases which I have examined, the proportions are the following:

	Children that had respired.		Children that had not respired.
1	1 : 43	1	1 : 58
2	1 : 35	2	1 : 36
3	1 : 44	3	1 : 49
		4	1 : 32
Average,	1 : 40	5	1 : 50
		6	1 : 52
		7	1 : 54
		Average,	1 : 47

Now the conclusions to be drawn from these observations, are manifestly adverse to the accuracy of this test. Taking the individual cases, there is not a single one of those which had not respired, which reach the proportions laid down by Ploucquet, while in the same list, cases 2 and 4 are very nearly the proportions laid down for children that have respired. If we take the general averages, too, of the cases, we find that they do not correspond with the proportions suggested by Ploucquet.

Since the time of Ploucquet, a great number of observations have been made by other persons, and as the result, they have all fixed upon different proportions. The following are some of them:

	Before respiration.	After respiration.
Schmitt	1 : 52	1 : 35
Chaussier	1 : 49	1 : 39
Devergie	1 : 60	1 : 45

These, as being deduced from a large number of cases, come nearer the true proportions than those of Ploucquet, and correspond more nearly with my own observations. Still, however, it is to be recollected that they are mere average numbers, and therefore do not meet the circumstances of individual cases, which of course they ought to do, for the purpose of rendering them practically available. It may be asked, then, is this test to be rejected altogether? As an infallible one, it certainly should be. Notwithstanding this, it is still, I think, valuable as furnishing corroborative proof, and should, therefore, never be neglected. It should always be taken in connection with the other signs; and when this is done, it may aid very materially in coming to a correct conclusion.

b. Absolute weight of the lungs. By some it has been supposed, that the actual weight of the lungs would furnish another criterion of the fact of respiration having taken place or not. Accordingly, an average weight of 1000 grains has been proposed for the lungs of a child which has respired, and 600 grains for those of a child which has not respired. A moment's reflection, however, must convince us that this is still more uncertain than the test of Ploucquet. Children born at the full time, we know, differ greatly in their weight, and of course there must be a corresponding difference in the weight of the lungs. I have known a child born at the full time, healthy and perfect in every respect, and yet weigh only four pounds; while children weighing eight, nine and ten pounds are by no means uncommon. The lungs, therefore, of a child which had not respired, of nine pounds, would probably weigh more than those of a child of four pounds, which had respired; and such has been found to be the case by actual observation. In the cases which I have examined, the following were the weights:

Before respiration.	
1	540 grains.
2	720
3	900
4	890
5	900
6	690
7	689
Average,	761

After respiration.	
1	396 grains.
2	800
3	814
Average,	670

An analysis of these weights will show at once how fallacious this test must be. We have here, in three cases, before respiration took place, the lungs weighing more than in those which had respired; while the general average weight is greater in those which had not respired—just the reverse of what it ought to be according to this test.

2. *The Hydrostatic test.* This test is founded upon the difference in the specific gravity of the lungs before and after respiration. In other words, lungs which have not respired will float in water, while those which have not respired will sink. Every observation which I have been enabled to make, has confirmed me in the general accuracy of this test. It is liable, however, to certain fallacies or objections which require to be understood, to enable us to make a correct practical application of the test. On the one hand, lungs which *have not respired* may float from *putrefaction*—from *artificial inflation*—from *emphysema;* while, on the other hand, lungs which *have respired* may sink from *disease*, or from the respiration *being feeble* or *imperfect.* Of these, I shall only notice two, as they are the only ones, of which illustrations have occurred in the cases which I have examined. They are, however, the most important of all the objections.

a. Putrefaction. That the lungs of a child which has not respired may float in consequence of putrefaction, although at one time questioned, is beyond doubt. The case which I shall presently relate, independent of numerous others, establishes this fact. The modes of distinguishing it from the floating of respiration are simple and obvious. *a.* By the air bubbles being visible under the external covering of the lungs. In vital respiration this is not the case. *b.* By the ease with which the air can be pressed out of the lungs. By simply squeezing them in the hand, they can readily be made to sink in the water. In vital respiration this cannot be done. *c.* By the sinking of the internal portion of the lungs. The air, in putrefaction, forms on the surface of the lungs; and hence the internal part, if cut out and put into water, will not float. In vital respiration, the internal part will float more readily than the external part of the lungs.

Case. Aug. 25, 1838. A still-born child was presented for examination by Dr. Wilson of Bellevue Hospital. The child had been born two days before. The weather being intensely hot, decomposition had commenced. The body was of a greenish colour; the abdomen greatly distended; the skin peeling off in several parts of the body. The cord about two inches long, smooth, soft, moist and flexible; weight, 31680 grains; length, 22 inches; the umbilicus twelve inches from the top of the head—the centre of the body, accordingly, a little above the umbilicus. On opening the chest, the surface of the lungs was found covered with air bubbles, varying from the size of a large pea to a pin's head. On the posterior part of these organs there were no air bubbles. The colour of the lungs was dark red, with here and there spots of a lighter hue. The lungs taken out of the chest, with the heart and thymus gland attached, floated in the water; separated from the heart and thymus gland, they also floated, as did also the latter organs. The weight of the lungs was 540 grains; making the relative weight to that of the body as 1 : 58. A portion of the internal part of the right lung being cut out, sank in water. Both lungs were now subjected to moderate pressure, and after this they sank in water. Each lung was now cut into ten pieces, and on being put into water, some sank, while others floated. On being moderately compressed between the fingers, each separate section sank rapidly to the bottom of the vessel. The ductus arteriosus was cylindrical in shape, and about the size of the pulmonary artery; the foramen ovale open; the umbilical vessels and ductus venosus pervious; and meconium in the large intestines.

This case illustrates, very strikingly, the fact that the lungs of a still-born child may float from putrefaction, and at the same time confirms the accuracy of the tests, by which it may be distinguished from the floating which is the result of vital respiration.

b. Artificial inflation. That the lungs of a child which has not respired may be artificially inflated, so as to cause them to float, though doubted by some, is well established; and when this is the case, it presents one of the most puzzling problems—to distinguish it from vital respiration. The only test upon which any reliance can be placed, is the application of suitable pressure to the lungs. If the floating be the result of vital respiration, no degree of pressure can expel the air from the lungs sufficiently to cause them to sink; while, on the other hand, in cases of artificial inflation, this can be done.

Case. Dec. 6, 1839. Examined a child which had been still-born, but which the accoucheur had attempted to resuscitate by blowing into its mouth, but without success. Length, twenty inches; the centre of the body at the umbilicus; head full of hair; nails full grown, and the body perfectly sound. Weight 47040 grains. No inflammatory circle around the navel; thorax flat. On opening the chest, the lungs were found in the upper and lateral portions of the chest, leaving the pericardium and diaphragm uncovered. On taking out the lungs, the *right* lung was of a dark red colour, with the exception of the lower part of the upper lobe, and the upper part of the lower lobe, which were of a bright red. The middle lobe had alternate patches of bright red and dark red. The left lung was dark red, with the exception of the extremity of the lower lobe and the posterior part of the upper lobe, which were bright red. Distinct crepitus in both lungs in the parts corresponding to the bright patches. The weight of the lungs was 900 grains, making the relative weight to that of the body as 1 : 52. Both lungs floated in water. The separate lobes of each lung also floated. The right lung was then cut into twelve pieces, all of which floated: but all the pieces sank after being subjected to pressure. The left lung was cut into ten pieces, and all but one floated. On pressure being made, they all sank. The pressure was made by placing them in a piece of strong linen, and then twisting and wringing them; after this they were placed under a large flat stone.

The ductus arteriosus was as large as the trunk of the pulmonary artery; cylindrical in shape, and much larger than the branches of the pulmonary artery. The foramen ovale, ductus venosus, umbilical arteries and veins all open.

This case is exceedingly interesting, as illustrating the effects of artificial inflation, and as showing how nearly they resemble those of vital respiration. The floating of the lungs was almost perfect, and the weight of the lungs (900 grains) was nearly that of the usual average standard of children that have respired. On the other hand, the sinking of the lungs, after due pressure, the relative weight of the lungs and the body, 1 : 52, and the state of the ductus arteriosus, were in favour of artificial inflation.

3. *State of the ductus arteriosus.* This is also called the *Vienna* test, from its being originally suggested by Prof. Bernt, of Vienna. It is founded on certain changes, which take place in the ductus arteriosus, immediately after respiration. In the mature fœtus before respiration, this duct is about half an inch long, cylindrical in shape, with a diameter about equal to that

of the pulmonary artery, and more than double the size of the branches of that artery, each of which is equal to that of a crow quill. If the child have respired a few moments, the duct becomes conical in shape, with its contracted part towards the aorta. If the child have respired for some hours or a day, it becomes cylindrical again in shape, but lessened in length and diameter. It is much less now than the pulmonary artery, and not larger than the branches of that artery. If the child have respired for several days or a week, the duct will be found still more contracted; its diameter will be not larger than a crow quill, while the branches of the pulmonary artery are much enlarged to the size of a goose quill.

The result of my observations goes strongly to support the accuracy of these observations. In six still-born children, I found the ductus arteriosus cylindrical in shape, and about the size of the main trunk of the pulmonary artery, and considerably larger than the branches of the pulmonary artery—in some cases double the size. In a seventh still-born child, I found it nearly the size of the pulmonary artery, but not much larger than its branches. In a child which had lived four days, the ductus arteriosus was cylindrical, three lines in length, and about the size of a crow quill, and not more than half the size of the pulmonary artery. In a child which had lived three days, the ductus arteriosus was two and a half lines long and cylindrical; about one-third the size of the pulmonary artery, and somewhat smaller than the branches of that artery. In a child which lived forty-six hours, the ductus arteriosus was one-fourth of an inch long, cylindrical in shape, less than half the size of the pulmonary artery and about equal to the branches of that artery.

Although the foregoing observations, generally speaking, confirm the accuracy of this test, it is to be recollected that it is not to be relied upon in all cases. This has been shown particularly by Orfila.

I have thus, as briefly as possible, recorded the results of the foregoing observations, without indulging in the many comments which naturally suggest themselves. I have, however, in another place,[1] so fully discussed all the points connected with this subject as to render them at present unnecessary.

Art. III.—ANALYTICAL ACCOUNT OF THE RESEARCHES AND RECTIFICATIONS IN THE PRACTICE OF AUSCULTATION AND PERCUSSION, made by Dr. Joseph Skoda, Teacher of Clinical Medicine in the Hospital of Vienna. By John Drysdale, M.D., and John R. Russell, M.D.[2]

[In a former number of the *Intelligencer* (p. 27) we published the views of Dr. Skoda on Auscultation and Percussion. The following article is a continuation of the former, and contains Dr. Skoda's views on the *Auscultation of the Heart.*—Ed.]

On the Sounds of the Heart.—Dr. Skoda first considers in detail the various theories which have been proposed to explain the production of the sounds of the heart, and the experiments on which some of these have been founded, and while he entirely dissents from the explanation of Hope, Burdach, and others, he partially agrees with those given by Magendie, Williams, the Dublin Committee of the British Association, &c.; and then proceeds to develope his own views, which, it will be seen, are fundamentally the same as those of Rouanet and Bouillaud, although differing in some important particulars.

To obtain a solution of the question as to the origin of the sounds heard in the region of the heart, mere vivisection will not alone, he thinks, suffice; but observations on healthy and diseased individuals, and a careful comparison of the phenomena observed during life, with the results of examination after death, are requisite. The sounds arising from the motions of the heart have not the same degree of distinctness and clearness in different individuals, although quite healthy; in one, they are not sharply marked, and scarcely to be heard, while in another, they are very clear; in one, they can scarcely be perceived in the region of the heart, in another, they may be distinctly heard almost over the whole anterior surface of the chest. In many individuals these sounds are heard most distinctly at the point where the heart beats, while in others they are only feebly heard at this spot, and more distinctly over the aorta and pulmonary artery. If the sounds heard at the point where the heart beats be compared with those heard above the base of the heart, at the part under which the aorta and pulmonary artery lie, it will often be remarked that towards the apex of the heart the first sound (*i. e.* that synchronous with the beat of the heart) is longer than the second, while, above the base of the heart, this relation is reversed. On comparing the sound heard at the spot where the apex of the heart strikes the chest, that is, over the left ventricle, with those heard under the sternum, in a line with that spot, *i. e.* over the right ventricle, it will sometimes be observed that the sounds differ in strength and clearness at these two points. Finally, in auscultating above the base of the heart, on the right side of the sternum, somewhat above its middle, *i. e.* the spot under which the aorta runs, the sounds will be sometimes heard different in strength and clearness from those heard in a line with this point about an inch on the left side of the sternum, *i. e.* over the pulmonary artery. These differences in the sounds, which are not unfrequently quite perceptible in healthy individuals, become much more distinct in the various morbid conditions to which the heart is liable. Those who have frequent opportunities of examining cases of diseases of the heart, will meet with instances in which both the normal sounds are entirely wanting in the part of the chest corresponding to the left ventricle, and their place supplied by a single or double abnormal sound resembling blowing, sawing, rasping, &c.; while to the right of this, over the right ventricle, and above the base of the heart, over the aorta and pulmonary artery, both the normal sounds are heard quite distinctly. In other cases, the sounds may be normal in the left ventricle, in the aorta and pulmonary artery, while they are replaced by a bellows-sound in the right ventricle. Still more frequently are cases met with in which a single or double bellows-sound is heard in the part corresponding to the course of the aorta, while both the normal sounds are heard distinctly over the right and left ventricles, and over the pulmonary artery. It also happens that a single or double abnormal sound may be heard over the aorta and left ventricle, while the normal sounds are heard over the right ventricle and pulmonary artery; or there is heard an abnormal sound over both ventricles, or over the right ventricle and the aorta, or over both ventricles and the aorta, while in the spots where no abnormal sound is heard the normal sounds may be distinctly perceived.

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[1] Elements of Medical Jurisprudence, by T. Romeyn Beck, MD., and John B. Beck, M.D.

[2] Edinb. Med. and Surg. Journ., Jan. 1842., p. 95.

If these observations are correct, then it follows that the right and left ventricles, the aorta and pulmonary artery are each, independently, capable of producing both the sounds heard in the region of the heart.

On comparing the observations during life with the results of dissections, it is almost always observed that abnormal conditions of the valves,—such as, excrescences, thickening, narrowing of the orifices, are formed in cases which have presented, during life, the alterations of the normal sounds described above. Yet it cannot be denied, that occasionally the valves are found not quite normal after death, in cases which presented no alteration of the sounds during life. This shows that it is not every change in the valves that is capable of producing a sufficiently perceptible alteration in the sounds; or that other circumstances must co-operate with the affection of the valves in producing alteration of the sounds. These facts render necessary a more detailed examination of the structure and function of the valves in the healthy as well as in the morbid state.

Action of the tricuspid and mitral valves during the motions of the Heart.—Dr. Skoda here directs attention to the mode of distribution of the *cordæ tendineæ* on the tricuspid and mitral valves, which, though previously overlooked, is of so much importance, that, without taking it into account, we cannot form an accurate idea of the precise mode in which these valves prevent the reflux of the blood into the auricles. We may, therefore, enter somewhat more fully into his description of the anatomy and function of these parts.

From each *columna carnea* run several stronger fibres (*cordæ tendineæ*) to the middle of the ventricular surface of the valve, and are inserted there, or some of them go to the base of the valve, and are inserted at the point of junction of the valve with the wall of the ventricle. From these stronger fibres, about their middle, and partly also from the *columnæ carneæ* arise finer-fibres, which are inserted nearer the free edge of the valve. These finer fibres serve as points of attachment to still more delicate ones, which are inserted nearer and into the free margin of the valve. By pulling the *columnæ carneæ* in the direction which they have in the heart, it will be seen that only the stronger fibres, which spring from the *columnæ carneæ* are stretched; both the other kinds remaining relaxed, even with the utmost force we can exert. By thus pulling we never can stretch the free edge of the valve, but only the part of it between its attachment and the point of insertion of the tendinous fibres, which arise in the *columnæ carneæ;* the whole of the rest of the valve, *i. e.* from the middle to the edge, remains relaxed. If we press back, in the direction of the auricle, any point of this loose part of the valve, so as to stretch the fibres that are inserted into it, a number of pouches are disclosed to view, and on further examination the whole ventricular surface of the valve, from the free edge to the middle, is found to present similar pouches, which are obviously formed by the peculiar mode in which the tendinous fibres are inserted. These pouches represent, as it were, small semilunar valves, and the tri and bicuspid valves present the appearance of a combination of a vast number of small semilunar valves, which are kept in their proper position by the tendinous fibres. By blowing or pouring water on the valve, this loose part is blown up like a sail, and the whole of the pouches are seen at once. During the contraction of the ventricle, when the blood tends to flow back into the auricle, it necessarily catches in these pouches, and thus spreads out the loose part of the valves as far as the tendinous fibres permit. By means of this expansion of the valve, the blood prevents its own reflux into the auricle, provided that the valve is held in such a position by the fibres that no opening remains upon its expansion. And to secure this, as is well known, the *cordæ tendineæ* take their origin from the *columnæ carneæ*, in order that they may present the same relative length during the contraction of the ventricle.

In order that the tricuspid and mitral valves may perform their function properly, they must display the above described pouches at the free edges, and the *cordæ tendineæ* and *columnæ carneæ* must have a length corresponding to the size of the ventricle. If the valve deviate from the normal conformation, then it is either unable to prevent the reflux of the blood into the auricle, or it offers resistance to the flow of the blood from the auricle into the ventricle during the diastole of the latter. The first of these is produced by thickening and shortening of the free edge of the valve; or by its adhesion to the finer tendinous fibres, thus producing obliteration of the pouches: or by shortening, lengthening, or laceration of the *cordæ tendineæ* or by deposition of excrescences, &c. on the edge of the valve; the second, by considerable excrescences, blood coagula, calcareous concretions, &c. on the auricular surface of the valve; or by adhesions of the *cordæ tendineæ* to one another, or to the free edge of the valve which prevent it from being freely opened.

Explanation of the Normal Sounds in the Ventricles.—The comparison of the observations made on patients with the results of dissection, have shown that a distinct first normal sound is almost never heard in the left ventricle, when the mitral valve is incapable of hindering the reflux of the blood into the auricle during the contraction of the ventricle, *i. e.* when it is imperfect. In such a case, there is heard an abnormal sound simultaneous with the systole of the ventricle; while at the same time a distinct normal sound can be heard in all the other parts of the region of the heart. The same may be observed of the right ventricle. The first sound which is heard during the systole of the ventricle, arises from the interruption of the stream of blood, from the shutting of the mitral and tricuspid valves, and depends upon the *columnæ carneæ* and *cordæ tendineæ* being thrown into vibration by the sudden closure—by the blood in the ventricle—of the mitral and tricuspid valves, and the reason that the sound is prolonged is, that the vibration continues as long as this state of tension is maintained. This explanation fully accounts for the prolonged character of the sound, for cords when suddenly stretched will vibrate for a considerable time, if the tension be continued, and may emit a clear or even ringing tone resembling the one which characterizes the first sound of the ventricles, and wholly unlike that produced by the contraction of muscles, which is always dull and indistinct.[1]

The explanation of the second sound in the ventricles is a point of much greater difficulty. It cannot be said that, in the normal state of the heart, a second sound always originates in the ventricles, since it is certain that the second sound heard in the ventricles is generally that transmitted from the semilunar valves. But there certainly are cases in which we are obliged to admit the origin of the second sound in the region of the ventricles themselves, viz. when the second sound is scarcely heard at all, or very weak, over the base of the heart, while it is heard clear and loud at the apex. Dr. Skoda thinks that none of the theories of the sounds of the heart afford a satisfactory explanation of this, and therefore leaves it quite doubtful; although he thinks it probable that it may originate in the sudden detachment, during the diastole of the ventricle, of the apex of the heart from the parietes of the chest, when it is covered with somewhat viscid effusion.

Explanation of the Sounds in the Arteries.—In the pulmonary artery, aorta, carotid, and subclavian arteries, sounds are usually heard exactly similar to the normal sounds of the heart. These have been usually ascribed to the propagation of the sounds of the heart along the arteries; but Dr. Skoda believes, for these reasons, that they have their origin in the arteries themselves. 1st, In certain rare cases a sound can be heard in all the larger arteries precisely similar to one of the normal sounds of the heart; and no one has thought of ascribing such sounds heard in the brachial or crural arteries to propagation of sound from the heart. 2d, Sounds are frequently heard in the carotid and subclavian, while the normal sounds are either not heard at all in the heart, or very much weaker than in the neck. It has been attempted to explain this by referring it to a peculiar mode of conduction of the sounds on account of some abnormity in the organs of the chest; but cases of this kind are common enough, where the lungs have been found quite healthy. Bouillaud also believes that the arteries may produce a sound, although not like the proper tic-tac of the heart, but one of an indistinct character. Skoda admits that, in the arteries more distant from the heart, such is frequently the character of sound heard; but the nearer ones, viz. the carotid, subclavian, aorta, and pulmonary artery, give in general a tic-tac, just as loud as is heard in the region of the heart, while, on the other hand, the sounds in the region of the heart are sometimes also dull and indistinct.

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[1] Dr. Skoda here notices, that a sound quite similar to that over the left ventricle may sometimes be produced, by the stroke of the apex of the heart against the walls of the chest, but does not lay any practical weight on it.

The cause of the sound heard in the arteries synchronous with the pulsation, *i. e.* the first sound, is, according to Skoda, the sudden tension of the coats of the vessel.

The second normal sound is heard in the aorta and pulmonary artery, and usually also in the carotid and subclavian. It is obviously produced by the shock of the column of blood against the semilunar valves, which is communicated to the coats, not only of the aorta and pulmonary artery, but also, not unfrequently, to the carotid and subclavian.

On the varieties in the Normal Sounds.—These sounds may, even in the healthy subject, present a great variety of modifications, which it is unnecessary to enter into here, except to make the practical observation, that the more the sounds have the clapping sharp sound, the greater is the certainty that they are produced by the proper action of the valves. And if the sound heard over the ventricles is of an undefined, murmuring character, it is proper to denominate it an indeterminate sound, (as has been already done with respect to respiration,) and draw no conclusion at all from it.

On the Abnormal Sounds.—These have their origin within the cavities of the heart, within the arteries or in their coats, or in the pericardium.

On the Abnormal Sounds which arise within the cavities of the Heart.—These have been variously denominated, according as they have been compared at different times by different observers, to the noise of a pair of bellows, a file, a saw, a rasp, &c., or they have been termed whistling or groaning, &c. The physical conditions necessary to the production of these abnormal sounds, are now generally admitted to be the friction of the blood against the walls of the heart and valves, caused by certain organic changes within the heart, viz:—

1st. Imperfection of the tricuspid and mitral valves, or of the aortic valves.

2d. Contraction of the left auriculo-ventricular orifice, or of the aortic orifice.

3d. Roughness, as from excrescences, cartilaginous or calcareous concretions, or blood coagula, on the endocardium towards the orifice of the aorta, on the lower surface of the semilunar valves of the aorta or pulmonary artery, or on the ventricular surface of the tricuspid and mitral valves.

Many have believed that these abnormal sounds may be produced without organic change in the heart, *e. g.* by mere spasm, as conceived by Laennec. This is denied by Skoda. Andral maintains that abnormal sounds may be generated in the heart, as the simple effect of general plethora. Skoda denies that this can take place unless there previously existed some organic change which was too slight to give rise to abnormal sounds during the ordinary action of the heart, but which produced one whenever the action became increased in consequence of the plethora. It has likewise been asserted that abnormal sounds arise after great losses of blood, and in anæmia in general, when the action of the heart is lively. Skoda has repeatedly examined patients in whom a deficiency of blood, either from bleeding or from disease, was well marked, when the action of the heart was lively, and he thinks he has even examined patients who have died of want of blood; but he has never met with a case where abnormal sounds were dependent solely upon that cause. Likewise, the abnormal sound heard in chlorotic patients is not found in the heart, but usually only in the arteries of the neck. In the aorta it is seldom loud, and in these cases it can at times be heard over the heart, although only as a dull sound.

It has been observed, that in the same case of heart disease, the character of the sound frequently varies, and at one time a bellows, and at another a saw sound, &c. is heard, according as the action of the heart is more or less energetic; and often it is quite arbitrary how the sound is denominated, for, if several observers auscultate the same case, one will compare the sound to a file, another to bellows, &c. Dr. Skoda therefore considers any subdivision of the abnormal sounds quite superfluous and of no diagnostic value, and comprehends them all under the general term "Geräusch," which has been here rendered "abnormal sound," and sometimes "bellows-sound," which, as most common, we employ as representing any abnormal sound, unless otherwise specified. The points of importance to know are where they arise, and whether they are synchronous with the systole or diastole, for upon these circumstances depend their value as diagnostic signs.

On the Abnormal Sounds in the Arteries.—All the different kinds of abnormal sounds which occur in the ventricles may be generated in the aorta. They are produced by excrescences, cartilaginous or calcareous concretions, &c. on the lining membrane of the vessel, attended with contraction, or dilatation, or normal size of its calibre. The state of the valves may likewise give rise to abnormal sounds, as when their lower surface is rough, when there are excrescences on the free edge, when they are rigid or adhering to each other, so that the stream of blood cannot press them quite back to the sides of the vessel; and when they are imperfect. Abnormal sounds in the pulmonary artery are of extremely rare occurrence.

Any notice of the various sounds in the other arteries in chlorosis, &c. would lead us into details inconsistent with the object of the present notice.

On the Pericardial Sounds.—When, from any cause, such as exudation of lymph, calcareous and other concretions, &c. the surface of the pericardium becomes rough, certain sounds are found to accompany the motions of the heart, either in the systole and diastole of the ventricles, or during the latter alone. It has been attempted by describing the different varieties of these sounds to obtain certain means of distinguishing affections of the pericardium from those of the heart. Bouillaud, in particular, has described three species, which he conceives to be peculiar to the pericardium, and capable of being distinguished from those which arise in the heart. Skoda has, however, found that these varieties of the rubbing sound certainly do occur in the pericardium, but also several more; and his experience has led him to the conclusion, that the rubbing sound in the pericardium may imitate every sound produced within the heart, with the exception of the whistling sound; and, on the other hand, every variety of the rubbing sound of the pericardium may occur within the heart. Likewise, the circumstance that a sound appears superficial or remote, is no ground of distinction; for a sound propagated through solid bodies appears quite superficial when it is loud, and *vice versâ;* and though a very loud bellows sound in the heart may often appear quite superficial, while a pericardial sound is often weak and dull, and therefore appears to come from a distance. There is nothing, therefore, in the character of the sounds themselves, or in the apparent distance, that enables us to determine whether they are produced in the pericardium or within the heart. The only direction that Dr. Skoda can give for distinguishing them, is, that the abnormal sounds within the heart follow exactly the rhythm of its beat, and correspond to the normal sounds, while those in the pericardium appear to be somewhat postponed. But this test cannot be applied when the beat is very short. We must then rest the diagnosis on the other circumstances of the case, such as the indications afforded by percussion, the consecutive changes attending valvular disease, &c. Dr. Skoda is further of opinion, that no sound can occur in the pericardium, until there is an exudation of plastic lymph, until, indeed, rough spots are formed on its surface—and that the motions must possess a certain degree of strength, for when they are too weak, the surface of the pericardium may be covered with a thick and rough false membrane, and yet no rubbing sound be produced.

Indications afforded by the Normal and Abnormal Sounds in the Ventricles, Aorta, and Pulmonary Artery.—Before entering on this it may be noticed, that the left ventricle is to be auscultated at the spot where the beat of the heart is felt; the right generally at the inferior part of the sternum; the aorta a little to the right and above the middle of the sternum;

and the pulmonary artery a little to the left of the middle of the sternum. The position of the right ventricle and pulmonary artery is variable, and can only be determined by that of the ventricles and aorta.

I. *a.* *In the left ventricle during the systole.*—*α.* The (first) normal sound without bellows-sound, indicates that the mitral valve closes, and thus prevents the reflux of the blood into the auricle.

β. Bellows-sound in the place of the (first) normal sound, arises from the imperfect closure of the mitral valve, and in this case it is caused either by the friction of the regurgitating blood on the rough spot of the margin of the valve, or by a stream of blood driven from the ventricle meeting one flowing in the opposite direction in the auricle; or from friction of the blood on rough spots in the neighbourhood of the aortic orifice, while, at the same time, the mitral valve may shut perfectly, or from a combination of both these conditions. In imperfection of the mitral valve, the pulmonary circulation is always overloaded, and obstruction afforded to the passage of the blood through the lungs, and hence follow increased action of the right heart, greater tension of the pulmonary artery, and consequently, preternatural loudness of the sound of the valves, *i. e.* the second normal sound heard over the pulmonary artery. Hence a bellows-sound in the left ventricle during the systole does not indicate imperfect closure of the mitral valve, unless the second sound in the pulmonary artery be at the same time louder than natural. If the second sound of the pulmonary artery be not strengthened, the bellows-sound heard during the dystole in the left ventricle indicates roughness either of the surface of the valve, or of the lining membrane of the ventricle in the neighbourhood of the aortic orifice; for it is only here that the current of blood has a sufficient velocity to cause a sound.

γ. *A bellows-sound accompanying the normal sound, affords the same indication as a bellows-sound without the normal sound.*—For the normal sound may be produced by the perfect closure of the mitral valve, while a bellows-sound is at the same time produced by rough spots near the orifice of the aorta; or the normal sound may arise from the expansion of some of the pouches of the mitral valve which remain normal, while the imperfection of the rest gives rise to a bellows-sound.

δ. *Absence both of normal and abnormal sounds is a phenomenon which gives no information as to the state of the mitral valve.*—For the valve may shut perfectly, and yet the presence of circumstances which deaden the sound may render it inaudible. But there may also exist imperfection of the mitral valve, and yet no bellows-sound be present, if the current of blood do not meet with any rough spots, or is not sufficiently rapid. This happens, however, very rarely. In such a case the diagnosis must be rested on collateral circumstances, such as the state of the valves of the pulmonary artery, &c.

b. Sounds heard in the left ventricle during the diastole.

α. *The normal (second) sound, without bellows-sound,* indicates that the left auriculo-ventricular orifice is not contracted, and that the blood does not encounter any rough spots in its passage from the auricle to the ventricle.

β. *Bellows-sound, either accompanying the normal sound or alone,* indicates contraction and roughness of the auriculo-ventricular orifice, or rough and projecting spots on the auricular surface of the valve without narrowing of the orifice. In contraction of the auriculo-ventricular orifice, the obstruction of the lesser circulation causes even more rapidly than imperfection of the mitral valve, hypertrophy with dilatation of the right ventricle, and increased loudness of the second sound in the pulmonary artery. If there be merely roughness of the auricular surface of the valve without contraction of the surface, there is no increase of the loudness of the second sound in the pulmonary artery, unless it happens to be there already from other causes. The greater the contraction of the orifice, the longer and more sonorous is the sound heard; and when considerable, it may give rise to that thrilling sensation felt with the hand over the region of the heart, called by Laennec *fremissement cataire.*

γ. *Absence both of normal and abnormal sounds* affords no definite indication.

II. *a.* In the right ventricle during the systole.

α. *The normal (first) sound without bellows-sound*, indicates that the tricuspid valve closes perfectly, and prevents the reflux of the blood into the auricle.

β. *Bellows-sound, alone or accompanying the normal sound*, indicates either imperfection of the tricuspid valve with rough spots on its free edge, or excrescences in the neighbourhood of the arterial orifice, while the valve closes perfectly: the latter, however, occurs very rarely. Imperfection of the tricuspid valve causes an accumulation of blood in the auricle, *vena cava*, and jugular veins, increased at each systole of the ventricle, and thus is produced the pulsation of the jugular veins. Imperfection of the tricuspid valve is thus indicated by a bellows-sound in the right ventricle during the systole, with simultaneous pulsation of the jugular veins.

b. Hitherto Dr. Skoda has never met with an abnormal sound during the diastole of the right ventricle; and the narrowing of the right auriculo-ventricular orifice, if it ever takes place, must be an extremely rare occurrence.

III. *a.* In the aorta during the systole of the heart.

α. *The normal (first) sound without bellows-sound*, does not necessarily indicate a perfectly normal condition of the aorta, for it may be present in various abnormal states of that vessel, such as alterations in its capacity or thickening of its coats, which may influence the intensity of its sounds without affecting their character.

β. *Bellows-sound, with or without the normal sound*, indicates rough spots on the inner surface of the aorta, or on the under surface of the semilunar valves. But in chlorotic persons, the vibrations of the carotid or subclavian are sometimes propagated down to the aorta, and thus are abnormal sounds—usually only dull—and may be heard in this vessel without there being any roughness present.

γ. *Absence of sound, normal or abnormal.*—The same remark applies here as when this occurs in the ventricles.

b. In the aorta during the diastole of the ventricles.

α. *The normal (second) sound without bellows-sound*, indicates the closure of the aortic valves.

β. *Bellows-sound, without the normal sound, if it is prolonged and heard beyond the base of the heart*, indicates imperfection of the semilunar valves, with rough spots on their free edges. If the bellows-sound is only of short duration, or heard only high up in the aorta, it may arise merely from rough places on the inner surface of the aorta, without imperfection of the semilunar valves.

γ. *Bellows-sound, ending in a normal sound*, arises from the presence of rough places on the inner surface of the aorta, while, at the same time, the semilunar valves close perfectly.

δ. *Bellows-sound and normal sound heard together, but so, that the bellows-sound is prolonged beyond the normal sound.*—This indicates that the aortic valves are expanded by the column of blood, but they are not quite perfect, and the regurgitating blood produces a prolonged bellows-sound.

IV. *a.* Hitherto Dr. Skoda has met with only three cases where a sound so prolonged as to be considered abnormal was heard in the pulmonary artery during the systole of the ventricles. But he had not the opportunity of ascertaining by dissection the cause of this.

b. During the diastole he has, as yet, never heard an abnormal sound in the pulmonary artery. The normal sound is strong in imperfection of the mitral valve, contraction of the auriculo-ventricular orifice as already mentioned; but it may also be strong without any such disease of the mitral valve, if there be hypertrophy and dilatation of the right ventricle, and lively action of the heart.

BIBLIOGRAPHICAL NOTICES.

Warrington's Obstetric Catechism.[1]

The author of this Catechism is a zealous prosecutor of Obstetrics, and we have often had occasion to refer to him in the pages of this Journal. He is engaged, too, actively in teaching practical obstetrics, and has gained the esteem of many pupils now spread abroad in various parts of the Union.

In preparing the book before us, Dr. Warrington states, that he has not followed the systematic arrangement adopted by any obstetric writer. "If," says he, "I have been biassed by any extrinsic influence, it has been by that of the courses of obstetric instruction given in the University of Pennsylvania, my Alma Mater. I have not, however, calculated it for the meridian of that school only."

It was not necessary, that the author should have pointed out this bias, inasmuch as it is evidenced in numerous parts of the volume, in which he brings prominently forward the opinions of the able Professor of Obstetrics in the University of Pennsylvania:—

Thus, "What diameter is the larger in the recent pelvis—the oblique or transverse? Ramsbotham says, the oblique—Hodge the transverse diameter, &c."

"What has been observed by Professor Hodge, of the direction in which the fibrês contract during the effort to expel the placenta?

"How does Dr. Hodge trace up the chain of morbid nervous actions or sympathies in these cases." [spinal irritation.]

"Does the chorion form the basis of the placenta? This point is not well settled, though in the opinion of Hodge, Dewees, and some others, it does."

"What is Professor Hodge's theory of the mode of formation of the placenta?" &c. &c.

This frequent reference to the views of the Professor of Obstetrics will render the volume more useful to the students of the University of Pennsylvania than to those of any other school: at the same time, it contains matter that is valuable to all. We do not, however, admire this method of *quizzing* or *grinding*, and would have preferred, that the book had taken any other shape than that of question and answer.

We may express our surprise, by the way, that nothing is said under the "signs of pregnancy," either of the blue colour of the vagina observed so frequently by Jacquemin, Kluge and others; or of the Kiesteine, regarding which we have now so much valuable information. Certainly, no obstetric course or book can be complete without a reference to the latter, the evidence in favour of which is perhaps stronger than that of any sign in the earlier months.

In respect, too, to the placental souffle—as it has been termed—Dr. Warrington might have alluded to the fact, that a similar sound has been heard, where there was no pregnancy. Of this the author has satisfied himself; and further evidence thereof is contained in the work of Hope, now in course of publication in the *Library*, and in the valuable additions made to it by Dr. Pennock.

We cannot but regret, that the estimable author should have allowed so many verbal inaccuracies to exist, especially as the work is intended for students. Thus, we observe—*Lamboid Suture*, *Saggital* Suture, Symphysis *pubes*, *Hyosciamus*, *Tympanitis* Uteri, *germniparous*, *epigenisis*, &c.

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[1] The Obstetric Catechism. By Joseph Warrington, M.D. 12mo. pp. 350. Philadelphia, 1842.

Circular Letter to the Physicians of Kentucky.[1]

The object of this letter is laudable. It is to exhibit the advantages which would accrue to the medical profession in Kentucky and to the public in general, by the establishment of a board of examining physicians, who shall meet annually for the purpose of conferring diplomas on all candidates who may be found worthy upon a rigorous examination. The committee appointed to prepare the circular were Drs. Linton, of Springfield, Duke, of Maysville, Burnet, of Trigg, and Bennet, of Kenton.

Transactions of the Medical Society of New York.[2]

This second part contains, 1. The annual address by Dr. John B. Beck, M. D., President; being a sketch of American Medicine before the Revolution, already noticed. 2. A brief review of Dr. Marshall Hall's views on an excito-motory system of nerves, by N. J. Davis, M. D. 3. Observations on some of the signs of live and still-birth—reprinted in the present number of the 'Intelligencer;' and, 4. The Appendix, containing an abstract of the Proceedings of the Medical Society of the State of New York, at its annual session, in February, 1842.

Pharmacopœia of the United States.[3]

In the present number of the 'Intelligencer' we cannot do more than announce the appearance of this *official* volume—which has for the last two years occupied so much of our attention, and that of our valued colleagues, Professors Wood and Bache, of the Committee of the National Convention—and recommend it to the special attention of all our readers.

Dr. J. B. Beck's Sketch of American Medicine before the Revolution.[4]

The author of this 'Sketch' is known as one of the most able and estimable physicians of this country. As an author, he has been long before the profession, and so highly impressed were we with the value of the "New York Medical and Physical Journal," of which he was principal editor, that nearly twenty years ago he was proposed by us a Corresponding Member of the "Medical Society," the oldest and one of the most respectable institutions of the British Metropolis, of which we were, at the time, Secretary for Foreign Correspondence; or, as the Latin diplomas say—"*ab epistolis ad exteros dandis.*"

The sketch before us appears in the "Transactions of the Medical Society of the State of New York," vol. v. part 2, and is a valuable contribution to the medical history of the country.

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[1] 12mo. pp. 12, Maysville, Kentucky, 1842.

[2] Vol. v. part 2.

[3] The Pharmacopœia of the United States of America. By authority of the National Medical Convention held at Washington, A. D. 1840. 8vo. pp. 279, Philadelphia, 1841.

[4] An Historical Sketch of the State of American Medicine before the Revolution, being the Annual Address delivered before the Medical Society of the State of New York, February 1, 1842: by John B. Beck, M. D., President of the Society, Professor of Materia Medica and Medical Jurisprudence in the College of Physicians and Surgeons of the City of New York; one of the Physicians of the New York Hospital; Corresponding Member of the Royal Academy of Medicine of Paris; Corresponding Member of the Medical Society of London, &c., 8vo. pp. 35, Albany, 1842.

Dr. Coventry's Valedictory Address.[1]

There is much good sense exhibited in the advice to the graduates of Geneva College, delivered by Dr. Coventry. In the midst of the repeated applications to the legislature of his state by *practitioners*, who neither are, nor ought to be, considered physicians, for all the immunities and privileges that are possessed by those who are rightfully such, we are not surprised that the whole subject of quackery should suggest itself to him; and we apprehend, that the following views on the subject are the most rational. They are at least such as we have always maintained, whilst we have been compelled to admit, that the evil may only admit of diminution—not, we think, of eradication. Man is essentially a gullible animal, and if one folly passes away, another—we fear—must soon succeed.

> "Some experience and much reflection on the subject has long since produced the conviction that this is an evil which can neither be combated by reason nor suppressed by legislative enactments. We would suppose that education and the diffusion of general intelligence would correct it, but past experience contradicts the supposition; our papers are filled with the names of men of education and talents attached to recommendations of nostrums, of the composition and effects of which they are perfectly ignorant. One mode, and only one, remains of correcting the evil; if this fails, it is remediless. Let medical men divest the profession of all the mystery in which it has unfortunately been enveloped—too long has the physician been considered the rival of the juggler. Let them demonstrate, that like every other science, it is founded on careful observation; that, it consists of the accumulated and recorded observations of successive ages; that no man is born a physician, but to acquire this knowledge is the labour of years of unremitting toil. Teach men the functions of their own system, how admirable in design, how complicated in structure, and yet how beautifully adapted in every part to the performance of its own appropriate functions. Then ask them if they are willing to trust the correction of derangements of this beautiful machine, to persons entirely ignorant of its several parts, when a single error may cost them their lives.
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> "To guard against quackery and empiricism out of the profession would not be the only good accomplished by the general diffusion of this knowledge. It would qualify community to judge as to the actual and comparative merits of members of the profession. The modest and unassuming physician would be elevated to his proper station, whilst presumptuous ignorance, whether with or without a diploma, would be consigned to deserved contempt. A knowledge of their own system would enable mankind to guard against many causes of disease to which they are continually subject. To accomplish this as far as possible has ever been a favourite object with the founders of this institution. It has been urged upon her graduates to improve every opportunity of giving popular lectures on anatomy, physiology and hygiene. There are few places where an audience could not be collected to listen to a lecture on those interesting subjects, and few physicians are so fully occupied during the first years of their practice but they could find ample time for their praparation and delivery. Permit me to repeat to you, young gentlemen, the recommendation; your leisure hours could not be more profitably employed either for yourselves or the public; and we ask for our Institution no prouder distinction than that her graduates should be everywhere known as the pioneers in the great work of reform."
> —pp. 14, 15.

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[1] Address to the Graduates of the Medical Institution of Geneva College, delivered January 25, 1842. By C. B. Coventry, M.D. Dean of the Faculty, and Professor of Obstetrics and Medical Jurisprudence. (Published by request of the Class.) 8vo. pp. 16. Utica, 1842.

MISCELLANEOUS NOTICES.

Thomsonianism in Michigan and New York.—[It is stated in recent Journals, that Thomsonians have now the benefit of law in Michigan in the collection of debts, "and to all intents and purposes are as much protected and respected as the first surgeons in America."! (*Boston Med. and Surgical Journal*, cited in *New York Med. Gazette.*) This news would not be a source of regret did the people in general possess adequate information on subjects connected with our profession. That they do not is matter of notoriety, and the pages of our own Journal, from time to time, afford ample evidence of the fact. The circumstance, indeed, that a legislature has granted such privileges and immunities to a class of uninformed individuals, merely because they support a preposterous doctrine—if doctrine it can be called—exhibits, that there is a sad lack of knowledge and discretion amongst those who ought to be the representatives of the better intelligence of the community.

In New York, the Medical Society, under a law of the State, tests by examination the qualifications of all practitioners. This, of course, does not suit the Thomsonians, who have petitioned the legislature for an exemption. The following report of the Committee on Medical Societies and Colleges on petitions "for a law to enable Thomsonian physicians to collect pay for their services" is conclusive, and we would fain hope,—against hope, however,—that the matter will be set at rest in that State, where these deluded or deluding individuals have been considerably turbulent.—Ed.]

Mr. Taylor, from the Committee on Medical Societies and Colleges, to whom was referred sundry petitions praying for a law which shall recognise the Thomsonian Medical Society of the State of New York, and enable the "Thomsonian," or "Botanic Physicians" to collect pay for their services, Reports:

That the petitioners represent, that "the Thomsonian physicians have formed themselves into a State society for mutual improvement and to establish due regulations respecting those who may become public practitioners," which they ask may be organised by law. They complain "that the law regulating the practice of physic and surgery in this State, operates unjustly;" that their "system of medical practice differs from that now sanctioned by law, so materially as to render it inconsistent and oppressive for them to conform to the requisitions of the legally established order of physicians;" and that "consequently they are deprived of the right of collecting pay for their services," which privilege they ask the legislature to grant to those who receive diplomas from the State Thomsonian Society. In short, they ask to be placed by law on a footing of equality, as to rights and immunities, with those who now enter the profession of medicine under the requirements of existing laws, without any obligations on their part as to qualifications, except such as they may voluntarily establish among themselves.

It is believed that it has never been the intention of the legislature to establish, or recognize by law, any particular mode or system of medical practice, and any attempt to do so would not only be unwise and impolitic, but, for many reasons, would necessarily fail of its object. The present laws regulating the practice of physic and surgery are doubtless designed to encourage the cultivation of science, to guard against the evils of ignorance in that most responsible profession which has the charge of the public health, and to secure to the people that guaranty of safety which is afforded in the assurance, that he who is authorized to practice medicine has at least devoted a reasonable time in acquiring a knowledge of his profession, and has submitted to the ordeal of an examination of his qualifications, by an authorised and competent tribunal.

The regular term of study established by law is four years, or three years with a complete course of all the lectures delivered in any incorporated medical college. The time thus required to be devoted in obtaining a competent knowledge of medicine and its collateral branches of science, an acquaintance with which is necessary to qualify the medical student for an enlightened discharge of the duties of his profession, has not been considered too much or unnecessarily burdensome; but, on the contrary, the opinion is becoming more prevalent among those best qualified to judge, that the standard of medical education should be elevated still higher, and more rigid rules imposed upon those who may seek to enter the profession. If it was only necessary to become acquainted with the principles of that philosophy, which teaches as one of its soundest maxims, "that the metals and minerals are in the earth, and being extracted from the depths of the earth, have a tendency to carry all down into the earth, or in other words, the grave, who use them. That the tendency of all vegetables is to spring up from the earth: their tendency is upwards; their tendency is to invigorate and fructify, and uphold mankind from the grave." If the range of medical study was to be confined to "the Thomsonian Guide to Health," a few books on botany, and two or three Thomsonian medical periodicals, and the study of anatomy and physiology discarded as useless, as seems to have been the opinion of the president of the Thomsonian State Medical Society, in his answer to a committee of this house in 1840, then, indeed, the term of study required by law might well be considered unjust and oppressive; but presuming it is not the desire of the legislature to encourage so limited a range of medical inquiry, your committee cannot imagine it will be deemed politic or wise to establish or reorganise, by law, a State society entertaining and teaching these views, and seeking to give them importance and influence by the sanctions of legislative enactments. If, then, the term of study at present required, is not too long to accomplish the designs of the legislature, it is submitted that the door of the profession is open alike to all; there is no exclusiveness or inequality of privilege; all are alike admitted who comply with the terms prescribed. There is no legal restraints imposed in the selection of medicine for the removal of disease. The licensed physician having had an opportunity of investigating to some extent the properties of the long catalogue of remedial agents, is at perfect liberty to select such as in his judgment shall be best adapted to the object in view; and if he shall prefer, in the treatment of any one disease, to employ "lobelia," "steam," "composition," or number 6," it cannot be doubted that his acquaintance with the human system, the pathology of disease, and the power of remedies, will ordinarily render these or any other agents more safe and successful in his hands, than in the hands of those who regard these qualifications as useless and unnecessary. It remains, then, for the legislature to determine, whether the standard of medical education shall be lowered to meet the wishes of the petitioners, and a particular mode or system of practice, which requires at most but a few months of time and study, shall be legally recognised as ample in its provisions, and safe in practice; or whether the Thomsonian, as well as all others, who may claim public confidence, and the immunities of the profession, on the ground of having conformed to the provisions of law, shall be required to come up to that standard of education indicated by the rules and regulations at present prescribed.

A part of the petitioners have only asked that the "Thomsonian physicians" may be allowed the privilege of enforcing payment for their services. They pray "that a law may be passed immediately, recognising the obligation of a contract made with Thomsonian physicians, so as to enable them, or *especially* such of them as may be duly licensed to practise by the State or County Thomsonian societies, to collect pay for services rendered by them, as physicians." It may be worthy of remark, that notwithstanding the petitioners maintain "that all men, everywhere, should have the protection of the laws in their various callings, and should be furnished with the same legal remedy for enforcing the moral obligations of a contract," they nevertheless appear to be the advocates of restriction, and ask that this "legal remedy" may be extended *especially* to the Thomsonian physicians. But as it is hardly to be supposed the legislature will adopt a variety of grades or degrees of qualification, it remains to be considered whether the only legal remedy now existing against unlicensed practitioners, and which renders them incapable of recovering, by suit, any debt arising from their practice, ought to be repealed.

All of the enactments regulating the practice of physic and surgery in this state, from that of the Colonial Assembly of the Province of New York, in the year 1683, to the present time, have contained some provision for enforcing compliance with the law. The act above referred to contained a penalty of five pounds against any person practising without a legal certificate. This was confined to the city of New York. In 1797 the first general law was passed, which contained a penalty of twenty-five dollars for practising without license. Since that period the penalty has varied, from time to time, until the act of 1835 repealed all penalties, leaving only the provision against the recovery of debt by suits. The effect of repealing this provision would be to admit all pretenders, of whatever description, to the same professional privileges as those who qualify themselves in conformity to present regulations. This, instead of carrying out the doctrine of equal rights and privileges contended for, would, in its effect, be very unequal, if it is supposed the law, without this or some similar provision, would have any binding force; for, while those who legally enter the profession would be required to devote years in qualifying themselves, and to submit to the ordeal of an examination, others, without being compelled to devote either time, study or expense, in preparing themselves, would be permitted to practise without penalty, and would possess the same legal remedy for enforcing payment for their services. Indeed, it appears to your committee, that the repeal of this provision would be, in effect, the repeal of all law regulating the practice of physic and surgery, so far as relates to qualifications; for the legal right to enforce payment would imply the right to practise, and it would be very much a matter of choice, and depend upon circumstances, whether men would take the legal steps to enter the profession, or some shorter and less expensive method.

The law regulating the term of study and qualifications of candidates for medical license, without some sanctions calculated to secure compliance with its provisions, would remain upon our statute book a dead letter. It might be regarded as an indication of the opinion of the legislature, but would have no more binding effect than regulations adopted by voluntary associations, and therefore had, perhaps, better be repealed; for, should the prayer of the petitioners be granted, it appears to your committee that it would be equivalent to a legislative decision that no particular term of study or test of qualification ought to be established by law.

Although medical science does not depend upon the arm of the law for its encouragement and progressive improvement, but is sustained and impelled forward by a higher and more noble impulse, yet it cannot be doubted that legal regulations have contributed largely to its more general diffusion among the profession, and, consequently, the more extended advantages of its application, and hence should be regarded as a public benefit, important to the welfare of the people. Your committee have, therefore, come to the conclusion to recommend the adoption of the following resolution:

Resolved, That the prayer of the petitioners ought not to be granted.

DR. MOTT AT EPIDAURUS.

[The following remarks on a visit to the site of the Temple of Æsculapius are rich in many respects. They at least exhibit rare enthusiasm, inspired by the god of physic; and manifested in a novel manner.—Ed.]

We arrived in this celebrated valley in the latter part of the afternoon, after a somewhat fatiguing journey from Napoli. It is by no means extensive, but a deep and picturesque ravine, as it were, between the mountains. Our feelings at arriving on this consecrated ground were peculiar and delightful, and such as cannot be well appreciated by any but a medical man. We eagerly sought out what may be supposed to have been the ruins of the Temple of the God of healing Art, dedicated to that deity, and built, it is believed, over the spot in this valley which he is related to have been born. We found in several places confused heaps of ruins, which however were not sufficiently defined to say positively to what character of edifice they belonged, or whether they were a part of the temple or of the ancient city of Epidaurus.

Desirous of rendering proper homage to our great tutelary divinity, we examined carefully every group of ruins, in order that we might be sure of doing justice to the great object of our visit, and, after inspecting them all with the hope that we might discover some fragment of the shrine upon which the votive offerings were placed, or one of those tablets upon which, it is said, the cures of the great physician were inscribed, and which might enable us to identify the actual locale of the temple and its altar. We gave up the search in despair; and concluded to select the great amphitheatre as the most suitable spot for the performance of the ceremonial we contemplated; and accordingly prepared the necessary material for commencing operations.

This immense theatre, incredible as it may seem, would accommodate within its enclosure, I should imagine at least 30,000 persons. It is on the steep side, as usual on the hills, and seemed to us from its imposing grandeur and remarkable preservation, to be an appropriate place for our intended oblation to the God Esculapius.

Let us stop for a moment to say a few words of this wonderful ruin. With the exception of that of Tramezas in Greece, and the Coliseum in Rome, and that of Nismes in France, it is not only the largest, but the most perfectly preserved edifice of the kind existing anywhere; and it would seem, from the extraordinary width of the seats, being twice that of any other we had visited, that it was admirably adapted, if not specially designed, for the comfort of invalids who probably resorted thither not only for the agreeable recreation of witnessing theatrical amusements and feats of gladiatorship, but also for medical treatment and advice under the renowned father of medicine in person. The poor as well as the rich, the lowly and the proud, the titled prince and the commoner of the land, irresistibly attracted by his fame and his great deeds, especially as the surgeon both of Jason and Agamemnon, flocked hither from all parts of the Continent, and even from Asia Minor, Egypt and Rome, and the distant Islands, to avail themselves of the consummate skill of the great master, who here, no doubt, within these noble walls, often personally officiated in his sacred rites and mysteries, and established, and held, and immortalised by his triumphant success, before tens of thousands of enraptured spectators, the first great clinique and cencours of our healing art.

The consciousness that I might possibly be standing on the very spot once consecrated by the presence of the great father of medicine, and where he delivered his oracles to adoring multitudes, and that I too, perhaps who might say, without egotism, that I had done the "medical state some service," was probably the only American surgeon who had ever visited this hallowed place, and that my voice, as once the commanding tones and inspired discourses of my great predecessor were, was now heard in its echoes through the same mountain ravine, produced together thrilling emotions of delight and trains of vivid thoughts, that language could but poorly pourtray.

It must be admitted, from historic evidence furnished by Homer and others of the siege of Troy, that even anterior to that remote period, both Esculapius and his two sons had unquestionably greatly distinguished themselves by remarkable cures in medicine or surgery, especially in the latter, to have attained a reputation so brilliant and extended as was that of these three famous Greeks. What they did probably within this beautiful valley, or within the enclosure of this magnificent amphitheatre, and in various other places, was no doubt as great for those days as have been for our times the exploits of professional men among the moderns.

As a traveller and humble representative of my profession from a new world, a *terra incognita* to him who has rendered this spot so illustrious and enduring in renown, I felt it my duty to make a propitiary sacrifice to his revered memory and name, and to his wide spread reputation as the ruling deity of our invaluable art. Having directed my servant, before leaving Napoli, to provide for me one of the tutelary emblems of Esculapius, the barnyard cock, of glossy black plumage, I now assembled my companions in the arena of the theatre to listen to a Grecian clinique by an American surgeon, and to witness the performance of a surgical operation which, I may venture to say, never before had been performed in this ancient land, even by Esculapius himself or either of his gifted sons. The victim designated for this honourable sacrifice having been transported from Napoli on one of the baggage horses, I requested my servant to introduce him into the arena. After a suitable exordium, setting forth the nature and gravity of the case, the solemnity and sacredness of the place, and the difficulty and importance of the operation about to be performed, I commenced, scalpel in hand, previously and properly denuding the neck of the feathers, to lay bare the common carotid artery of one side, the patient being firmly held upon one of the seats of the theatre, now again after a lapse of 3000 years, to be devoted to anatomical and surgical uses. With the able assistance of my excellent friend and companion, Dr. Jackson, of New York, after having laid bare the important vessel, and with proper caution separated it from the deep jugular vein and par vagum, I introduced carefully underneath it, by means of a curved eyed probe, a silk ligature, and then tied the artery. After waiting a few moments, and finding that the animal, so far from experiencing any inconvenience from this modern and dangerous operation, submitted to it with a grace and heroic resolution befitting the distinguished honour conferred upon him, we concluded, upon consultation, to tie the carotid of the other side, which was also done in a similar manner. I remarked to the pupils present at this Greco-chirurgical clinique, that this was the *twentieth time* I had tied this important vessel, having performed it *nineteen* times on the living human subject in my native country. It is a coincidence not improper, perhaps, to mention, that shortly before leaving my own country the last time I tied the carotid with success on a young man who, about a year before, had the same artery tied on the other side, making perhaps the second remarkable instance of a human being recovering after both these arteries had been successfully secured.

Though we found our feathered patient, also had apparently sustained no serious injury, we deemed it suitable to the occasion to make a further and more solemn sacrifice by dividing the spinal marrow of the intrepid chanticleer, and thereby terminating his martyrdom, and giving a brilliant finale to our ceremonies by offering up his whole life to the god of physic. The body was then transferred to one of the baggage-horses and carried with us to Athens, where we arrived two days after. And to complete the funereal rites, we there devoted his remains to the cause of gastronomy, by having them served up to us in an excellent supper under the walls of the Parthenon; flattering ourselves at the same time with the consoling idea, that among the gorgeous array of canonised deities, heroes, kings, generals, orators, and poets whose statues once adorned every summit and quarter of this proud city, she who was the tutelary goddess of Athens, Minerva, the protectress of Science, and especially that form of this deity called *Minerva-Hygeica*, so named after a daughter of Esculapius, was looking down from the Acropolis with smiling approbation at this convivial result of our labours in honour of her renowned father. The last finishing stroke was to secure from the wreck of the victim as *os hyoides*, commonly called the *merry-thought*, for my museum in America.

University of Pennsylvania.—Medical Department.—The Medical class of this Institution numbered, during the last session, 363 matriculates.

At a Public Commencement held the 26th day of March, 1842, the following gentlemen received the degree of Doctor of Medicine.

NAME.	RESID.	SUB. OF ESSAY.
Anderson, J. Q.	N. C.	Cynanche Trachealis.
Anderson, T. J.	Ala.	On Hygiene.
Ashton, Henry	Va.	Intermitting Fever.
Banister, Monro	Va.	Puerperal Fever.
Banks, W. H.	N. C.	Puerperal Peritonitis.
Batte, W. H.	Va.	Dysentery.
Baxter, Oscar F.	N. C.	Parturition.
Blaney, J. V. Z.	Del.	The Inv. of the Veg. Mat. Med.
Brakeley, P. F.	N. J.	Anasarca.
Brinson, W. A.	Ga.	Congestive Fever of the South.
Brown, Walter A.	Va.	Cynanche Trachealis.
Bryan, Jesse G.	N. C.	Dysentery.
Budd, Andrews E.	N. J.	Prolapsus Uteri.
Burtt, John L.	Ohio.	Dietetics.
Cage, Edward R.	Tenn.	Cholera Infantum.
Chamberlaine, S.	Md.	Urethral Stricture.
Christian, P. H.	Va.	Disease of Kidney.
Clements, W. W.	N. C.	Intermittent Fever.
Conrad, Daniel	Va.	Acute Gastritis.
Cook, Lewis C.	N. J.	Reproduction.
Cornick, W. T.	Va.	Scarlatina.
Crudup, E. A.	N. C.	Spontaneous Hæmorrhages.
Currie, Shelby	N. C.	Dyspepsia.
Dailey, R. W.	Va.	Amenorrhœa.
Davis, W. W.	N. C.	Acute Gastritis.
Dennis, George	Md.	Typhus Fever.
Dickey, Robert	N. Scotia,	Acute Peritonitis.
Dickinson, J.	Tenn.	Delirium Tremens.
Dozier, J. A.	Ala.	Hydrocele.
Edgar, S. M.	Tenn.	Gunshot Wounds.
Egan, John F.	St. Croix,	Blood.
Gravatt, J. J.	Va.	Scarlatina.
Graves, A. W.	Va.	Hæmatemesis.
Green, J. W.	Va.	Fractures.
Greenbank, R. M.	Phil.	Autumnal Fever of Q. Anne Co.
Gwathmey, W. H.	Va.	Bilious Rem't Fever.
Hammett, G. A.	R. I.	Akenesic Power.
Hawkins, W. J.	N. C.	Indigestion.
Heard, Joseph M.	Ala.	Depletion.
Henkel, S. P. C.	Va.	Aneurism.
Henry, E. W.	Md.	Cholera Infantum.
Hilsman, J.	Ga.	Gonorrhœa.
Hogan, James	Mo.	Prolapsus Uteri.
Hollingsworth, S. L.	Phil.	Iritis.
Hood, James M.	Ky.	Circulation of the Blood.
Hotchkiss, J. T.	Pa.	Rubeola.
Hunter, J. A.	Va.	Theory of Menstruation and Amenorrhœa.
Hutchinson, M. P.	Pa.	Prolapsus Uteri.
Johnes, Theodore	N. J.	Hydrophobia.
Jones, Josiah N.	Va.	Intermittent Fever.
Kane, Elisha K.	Phil.	Kiesteine.
Kennon, Richard	Va.	Means of easing the pains of Parturition.
Little, R. Parker	Pa.	Tetanus.
Littlefield, E. B.	Tenn.	Deformity from Anchylosis.
Logan, John D.	Pa.	Arthritis.
Macnair, A. H.	N. C.	Menstruation.
Magrudor, A. L. C.	Miss.	Congestive Fever of Mississippi.
Manry, Josiah	Va.	Acute Gastritis.
Martin, Franklin B.	Pa.	Pleuritis.
Mason, John K.	N. Y.	Scrofula.
Meade, David E.	Va.	Emotional Tears.
Mettert, John H.	Va.	Leucorrhœa.
Miller, Lewis A.	Va.	Scarlatina.
Mitchell, Henry H.	Md.	Cholera Infantum.
Montgomery, H. F.	N. Y.	Dislocation of the Os Humeri.
M'Farland, J. P.	Tenn.	Fungus Hæmatodes.
M'Nairy, W. S.	Tenn.	Intermittent Fever.
Old, Hollowell	Va.	Peritonitis Puerperalis.
Page, Mann A.	Va.	Scarlatina.
Palmer, W. P.	Va.	Irritable Uterus.
Peete, John S.	Tenn.	De Febre Biliosa Remittente.
Pennypacker, M. J.	Penn.	Respiration and Animal Heat.
Phillips, James W.	Tenn.	Idiosyncrasy.
Postlethwaite, J.	La.	Fever.
Pritchett, E. H.	Va.	Metritis.
Purnell, G. W.	Md.	Icterus.
Ray, Duncan W.	S. C.	Forensic Medicine.
Reid, James M.	Ky.	Scarlatina.
Revely, Thomas C.	Va.	Neuralgia.
Rider, William G.	Md.	Tenotomy.
Robinson, Moore	Va.	Pathology and Symptoms of Pneumonia.
Roper, William W.	Va.	Amenorrhœa.
Saulsbury, Gove	Del.	Rheumatism.
Scholl, Griffith, J.	Pa.	Phlegmasia Dolens.
Shoemaker, Edwin	Pa.	Acute Gastritis.
Shove, George	Mass.	Therapeutics.
Steele, Robert J.	N. C.	Phthisis.
Stevens, R. H.	Mo.	Milk-sickness of the West.
Strother, William	Va.	Dyspepsia.
Taliaferro, B. F.	Tenn.	Hydrocephalus.
Tannor, John G.	Va.	Acute Gastritis.
Taylor, Thomas B.	Flo'a.	Spermorrhoea.
Todd, William	Ky.	Inflammation.
Tompkins, F. O.	Va.	Menstruation.
Towles, Thomas	La.	Scarlatina.
Trippe, Jesse E.	Ala	Acute Gastritis.
Tunstall, Robert B.	Va.	Delirium Tremens.
Tyler, Samuel	Md.	De Puerperali Peritonite.
Waddell, James A.	Va.	Iodine.
Walker, John B.	Mass.	Hydrocele.
Walton, Richard P.	Va.	Arsenic.
Ward, Edward H.	Phil.	Amaurosis.
West, Francis	Va.	Iron.
Wharton, Albert C.	N. C.	The Revulsive action of medicine.
White, John F.	Va.	Prolapsus Uteri.
Woodland, T. W.	Md.	Dyspepsia.
Wright, John J.	Va.	Fractures.
Yancey, Henry	N. C.	Emetics.
Young, Thomas H.	Miss.	Aneurism.

At the Commencement in the Arts, held in July, 1841, the following gentlemen received the degree of Doctor of Medicine.

L. N. Burge,	Ga.	Conception.
Joan T. Clarke,	Pa.	Gonorrhoea.
M. P. Linton,	Pa.	The Seven Eras of Women.
John Miller,	Pa.	Intermittent Fever.
W. M. Thompson,	Va.	Acute Gastritis.

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For the American Medical Intelligencer.

ART. I.—ON THE ECLECTIC TREATMENT OF DELIRIUM TREMENS.

BY THE EDITOR.

In a recent work (*Practice of Medicine*, vol. 2, p. 346. Philad. 1842) we have stated, that the course pursued by us, in the treatment of delirium tremens, has been entirely eclectic, in many cases expectant, and that the results have been such as to satisfy us. Under the view which we entertain of the nature of the affection,—that the irregularity of nervous action is usually induced by the withdrawal of an accustomed stimulus, and that the recuperative powers are, generally, entirely sufficient to bring about the necessary equalisation, we have treated the mass of the cases which have fallen under our care without either excitants proper, or opiates. In the first instance, an emetic is given at times, if the patient is seen whilst labouring under the effects of a debauch, or any particular reason exists for its administration; and afterwards a state of tranquillity in the chamber is enjoined—the intrusion of too much light and noise being prevented; and, where the stomach will retain it, gently nutritious and easily digestible diet is prescribed; the bowels being kept open by gentle cathartics: and this has comprised the essential part of our treatment. In time, the hallucinations have disappeared, sleep has returned, and entire restoration supervened.

The preceding remarks are a proper prelude to the statistical account of the Women's Lunatic Asylum, at the Philadelphia Hospital, for the years 1840 and 1841, which is under our charge during the six months commencing on the first of November, and ending on the first of May; and under that of Dr. Pennock for the other half of the year. It may be proper to add, that since November 1, 1841, to the present time, (May 1,) not a drop of alcoholic liquor has been used in the treatment of delirium tremens in the Women's Asylum, although some severe cases in the third stage have occurred, which, notwithstanding, terminated most satisfactorily.

Patients admitted into the Women's Lunatic Asylum of the Philadelphia Hospital.

Year 1840.

		Cases admitted.	Cured.	Died.
Intoxication,	- - - - -	25	—	—
Delirium tremens,	first stage, -	34	34	—
do.	second stage,	10	10	—
do.	third stage,	4	3	1

The fatal case was not seen by us. The patient died on the morning after her admission into the hospital, and had been treated in the city for nearly a week previously.

Year 1841.

		Cases admitted.	Cured.	Died.
Intoxication,	- - - - -	19	19	—
Delirium tremens,	first stage, -	21	21	—
do.	second stage,	9	9	—
do.	third stage,	6	6	—

For the American Medical Intelligencer.

Art. II.—Account of the POST-MORTEM examination of a Case of DEAFNESS, in which were found an abnormal State of the OSSICULA AUDITUS, with other irregularities in one Ear, and Destruction of the MEMBRANA TYMPANI and disorganisation of the soft parts in the Tympanum, &c. in the other.

BY JOSHUA J. COHEN, M. D. OF BALTIMORE.

[The following valuable communication was read before the American Philosophical Society, at a recent meeting; and is noticed in the "Proceedings" of that body. It has rarely happened that opportunities have been embraced for examining into the condition of the organ of hearing in cases of deafness, or that they have fallen within the observation of an investigator so competent as the author of this Paper.—Ed.]

The facts contained in the following paper have been deemed worthy of note, as adding one more example to the few on record of the undeveloped or rudimentary condition of a portion of the organ of hearing in man. For this reason the case has been thought of sufficient interest to claim the honour of the attention of the members of this society. Although the irregularity belongs to a very minute structure of the human body, it is nevertheless connected with an important organ, whose whole structure is minute, and in which every deviation, however slight, from the usual normal state, must influence, more or less, the proper exercise of its function.

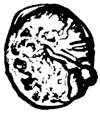
Those members of the society who have been engaged in investigating the pathological conditions of the organ of hearing, and have felt, like myself, even with our present improved methods of investigation, the difficulties attendant thereupon, from the want of a series of well-observed facts, will, I am sure, receive with due attention, every contribution that may tend, in the slightest degree, to illustrate the condition upon which manifestations of disease depend.

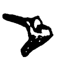
Case.—While engaged in September last in some investigations upon the ear, at the Baltimore County Alms-house, my attention was called by Dr. Cunningham, one of the resident physicians, to the case of a man (æt. about 40) who had just died, and who, during his residence of six months in the house, laboured under great difficulty of hearing. He died of tubercular phthisis, and the examination which Dr. C. made, showed the usual condition of the lungs in that disease.

Glad of the opportunity, so rarely afforded, to investigate *post-mortem* the condition of the organs of hearing of one who, it was known, was deaf, I readily availed myself of the information, and proceeded at once to examine the state of the brain and seventh pair of nerves. These parts were carefully dissected, but there was observed no change from the usual condition.

In order to examine at greater leisure, and more carefully than I could do at the moment, the several parts of the minute apparatus of the organs of hearing, and particularly to note the condition of the Eustachian tubes, a portion of their structure which has lately attracted much attention in cases of deafness, I removed the whole lower part of the skull, so as to preserve the connection of these tubes, and on the following day observed the appearances now to be described.

Eustachian Tubes.—These were found in nearly the same state on each side: their guttural orifices were unusually large. The cartilages around them were much developed, particularly that of the right tube. The tubes themselves were unobstructed in their whole extent, and their diameters even larger than common.





Right Ear.—The external ear and meatus presented the usual appearance—the lattter having been sawed off so as to expose the membrana tympani; this membrane, instead of the uniform, clear, semi-transparent and glistening character usually observed, with its concavity only towards the middle, was of a dull and dark appearance, irregular, and evidently thickened; the concavity extending from the circumference, saucer-like: the whole membrane being drawn inwards.

The bone was now cut through so as to show the cavity of the tympanum. This was found to be very much narrowed by the approximation of the membrana tympani to the opposite walls; and, instead of a clear, empty space for the ossicles, &c. the tympanum was filled with muco-fibrous membranes passing from the membrana tympani to the posterior wall, presenting a cellular structure.

Perceiving some irregularity in the ossicula, I carefully divided these membranes, in order to get a distinct view of the bones *in sitû:* when the *tensor tympani muscle* was exposed, I found that the membrana tympani with its ring of bone was only bound down in its place by this connection; the chain of bones being incomplete. Before separating this bond of union, I noted the unusual shortness of the tendon of the muscle of the malleus, and that it was attached to the handle of this bone throughout its whole length, thus drawing down the bone, and with it the membrana tympani to within a line of the cochleariform process. This tendon having been divided, and the membrana tympani with its ring of bone separated, the following abnormal state of the bones was seen:—

Ossicula Auditûs.—The *malleus* was normal, but its relation to its proper muscle irregular, as above described.

Incus.—This bone was undeveloped. Its size and form will be better understood by a reference to the accompanying drawing. It has a small articulating surface, by which it is closely attached to the corresponding surface of the malleus—from this a very short process extends backwards towards the mastoid cells, not reaching, however, beyond the circumference of the membrana tympani, to which it was attached closely by a thick fold of membrane reflected from the latter. This constituted the whole bone.

Stapes.—The stapes was wanting, with the exception of the *base*—this was nicely adapted to the size of the fenestra ovalis, leaving, as is usual, a small space all around for the circular ligament, by which it was retained in place.

Upon the tympanic side of this *basis*, and almost filling up the *fossa*, there was a quantity of membranous substance, which connected itself with the cellular structure already described. The *fenestra rotunda* was covered by the same.

Muscles.—The muscle of the malleus (*tensor tympani*) was strongly developed: its tendon was short and very thick, and its attachment peculiar, as above mentioned. The muscle of the stapes (*stapedius*) existed, but there was no tendon at the small orifice at the summit of the pyramid. Thus, in regard to both these muscles, the development seemed in accordance with the function required of them. In the one case, as no stapes existed, the *stapedius* was only partially developed. In the other, the tensor tympani had alone to keep the membrana tympani in place, and it seemed to do so by its short thick tendon.

The other parts of the organ appeared to be in a normal state.

Left Ear.—External ear and meatus were healthy. On cutting away the meatus, the membrana tympani was found to have been entirely destroyed, with the exception of a very thin slip at the anterior inferior edge. The tympanum was thus fully exposed: it contained a quantity of yellowish, fetid matter, and its lining membrane was completely disorganised.

Ossicula.—The *malleus*, though its *handle* was depressed, was still attached to the incus; but the union was slight, the ligamentous and mucofibrous connections being involved in the general disorganisation.

The *incus* was in place: its long *crus* extended to the stapes, but it merely rested upon the latter, the bond of union being broken up, and the least motion separating the bones.

The *stapes* seemed to stand merely in its *fossa* over the fenestra ovalis; it was not bound down by its appropriate band, being easily moved from its position. The ligament (*ligamentum annulare bas. stap.*) forming the important connection between its base and the surrounding bone was entirely destroyed.

The tendon of the *tensor tympani* was disorganised, and that of the *stapedius* destroyed.

The whole condition of the tympanum showed a recent active suppuration, which did not confine itself to this part: the vestibule was penetrated, as well as the mastoid cells; the latter were covered with pus.

The cochlea and one of the semicircular canals were examined a day or two subsequently—but there was nothing remarkable about them, at this time, worthy of note.

Having completed the examination, it became a matter of great interest to me to know something more of the man's hearing, and in reply to my inquiries on the subject, Dr. Cunningham was good enough to address me a letter, in which he says, "The man had resided in the house six months, and it was observed by the nurses of the hospital that his deafness had considerably increased from the time of his admission to that of his death. During the latter part of this time, the difficulty of hearing was so great as to preclude any conversation with him." "An inmate of the house," continues Dr. C., "has lately informed me that he knew W. some six or seven years ago, at which time he was in the habit of attending the markets: he was somewhat deaf even at that time, but could hear when spoken to in a moderately loud tone. He also informed me that he noticed W. when addressed, to incline his *left* ear to the speaker, from which, I suppose, we must infer, that the loss of the faculty was less on that side."

From this information, together with the facts disclosed by the *post-mortem* investigation, I think we are justified in the conclusion, that the faculty of hearing in the right ear was either entirely wanting, or was very much impaired; for the custom of turning the head round, so as to make use of the left ear, must have been very decided to have been remembered after the lapse of years; it was doubtless a habit that had become identified with his person. Independently of the general inference that every deviation from the normal state of an organ must be attended with an impairment, if not a loss of the function of that organ, the irregularity in this (right) ear was very great, and obviously calculated, from the known laws for the propagation of sound, to impair its communication.

Had the membrana tympani been capable, in its abnormal state, of communicating sonorous vibrations, the relation of the malleus, in contact with it, to the parts within, would have conducted them indirectly to the nervous expansion within the labyrinth; for it will be recollected, the chain of ossicles was broken up by the absence of an important link. But the tense condition of the membrana tympani, as it here existed, was not well calculated for the communication of sound, had the other parts of the organ been perfect. The experiments of Savart and Müller show that under this state of a membrane, the intensity in the communication of sonorous undulations is much diminished, and Dr. Wollaston, in applying the principle to the membrane of the ear, found, by experiment, that a temporary imperfection of hearing always resulted when it was made tense. It is true that the experiments of Dr. W. showed that this incapacity had reference only to certain sounds; (for when the membrana tympani was made tense, grave sounds only were rendered inaudible;) still, for the perfection of hearing conversation, there should be an equal capability both for acute and grave sounds.

As to the influence upon the function of the ear, of the several other parts in their abnormal condition, many suggestions offer themselves to the mind. It may be worthy a passing inquiry, how far nature may have intended, by bringing down the handle of the malleus in such close proximity to the walls of the labyrinth, to compensate for the usual communication, through the chain of bones, to the vestibule.

One more remark may be made; that if the membrana tympani had been capable of communicating vibrations to the *air* within the tympanum, the base of the stapes, or operculum, like the same moveable plate in some of the reptiles without a tympanum, offered no impediment to the communication of the undulations to the fluid of the labyrinth.

In regard to the condition of the *left ear*, the result of disease, we are much more familiar, and can readily understand, under the supposition that the right ear was unfit to perform its function, how the hearing of the individual, towards the close of his life, became so much impaired, or was probably entirely lost. It is likely, judging from the state in which it was found *post-mortem*, that the membrana tympani was for a long time in a state of ulceration, with perforation; and that this was its condition six or seven years ago, the time spoken of in reference to the hearing. This is a very common cause of impaired hearing in scrophulous persons. My observations in numerous cases have shown, that in such cases, where the perforation is of small extent, the hearing is only partially lost or slightly impaired. Where the ulceration extends, so as to produce entire loss of the membranæ tympani even of both ears, although the hearing is much more impaired, yet if the disease be limited to this membrane only, it is not so much injured as would be, *à priori*, supposed. Even when the disease is allowed to extend to the parts within the tympanum, and the *malleus* and *incus* come away, if the ulceration do not embrace the ligament and membranes binding the *stapes* to its place, the loss of the faculty is still not great. Should, however, this part become affected, the stapes generally comes away, the inner structure of the ear becomes involved, and loss of the faculty is the result.

I cannot but believe, that such was the progress of disease in this ear. The increase of the deafness was doubtless owing to the increase of the ulcerative process in the ear, corresponding to the development of the same condition in the lungs. The whole membrana tympani was destroyed; the fibrous or fibro-mucous tissue of the tympanum became implicated; the ligament or membrane connecting the stapes to the fenestra ovalis was destroyed, and the inner and more important parts of the organ were involved. That this extension of the ulceration could not long have existed, to the degree found at the post-mortem examination, is probable, from the position of the ossicles. I have generally found that when this destructive disease is not soon arrested, the malleus and incus come away. In the present case, the falling off of the vital powers seems to have involved the whole texture of the tympanum at once; the bones were undisturbed in their position, the stapes stood in its place, whilst all the surrounding textures were destroyed, and very great, if not entire loss of the faculty was the result, in the short period he remained in the hospital.

Instances of irregular development of the ossicula auditûs, and other malformations of the ear, are not entirely wanting in the works of anatomists. Pathologists, however, have had few opportunities of presenting such cases in connection with impaired function of the ear, previously observed. Morgagni[1] makes mention of two cases, certain of the features of which bear some resemblance to our present one. In speaking of the various causes of deafness, he says, "It is not to be doubted but that their number may be increased every day, as, for instance, when *innumerable membranes drawn from all sides, and intersecting each other, mutually occupy the whole cavity of the tympanum;* as I found in that ear, in regard to which marks were not wanting, that the man had not heard at all, or at least very little; and in like manner, *when any muscle out of those which serve to the motion of the little bones in the tympanum is immovable and contracted,* as I found in another man, who, when he was alive, if any one could have divined, would not, I believe, have been interrogated, to no purpose at all, concerning the certain disorders of that ear."

It may be well to observe before concluding, that if the abnormal state of the incus and stapes, as found in the present case, be the result of an arrest of development, it would go to confirm the opinions of Meckel rather than those of Cassebohm in regard to the order of development of the *ossicula:* for the details of which I beg leave to refer to the well known work on anatomy of the former. And in regard to the small portion of the stapes that exists in our case, the remarks[2] of Professor Tiedemann of Heidelberg seem apposite. In describing two cases of peculiarly formed *stapedes,* he remarks that such is the infinite variety presented by the animal organisation in all its parts, that we cannot fail to observe a well marked gradation from the most simple to the most perfect of beings, and that every aberration in the form of any of the organs of the upper groups approximates them to that of the inferior ones. In illustration of which, Professor T. describes two cases, one of them in a new-born child, the other in an adult, where the *stapedes* were so altered in form as closely to resemble the *columella* of the *ornithorynchus,* the *echidnas,* and that of birds and reptiles.

In the case described in this paper, does not the absence of every part of the *stapes,* with the exception of the *base,* liken it to the osseous operculum found in the *bombinatores, land salamander,* and *cæciliæ;* of the effect of which, in the communication of sonorous undulations I have already spoken?

Art. III.—PRUSSIATE OF IRON IN INTERMITTENTS.—CONGESTIVE FEVER.

[Extract of a letter to the Editor, from J. E. Craighead, M. D., Somerville, West Tennessee, dated April 26, 1842.]

"In the absence of sulphate of quinia, as we got out of it last year, I have used prussiate of iron very successfully in intermittents last fall.

"The most successful plan I have found for treating the congestive fever of this country is to bleed in the cold stage, purge freely, and break up the chain of morbid actions by powerful doses of tonics, bark, or sulphate of quinia. The sulphate of quinia we usually get here is so adulterated, that I frequently use five grain doses every two hours without any unpleasant effects. I have never yet lost a case of congestive fever, though I have had a good many during the last six years."

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[1] De Sedibus et Causis Morborum.

[2] Journal Complem. du Dict. des Sc. Med. Nov. 1820.

ART. IV.—ON CONGESTIVE FEVER.

[Extract of a letter from Dr. Jos. J. Thaxton, Williamsville, Person county, N. C., to Professor Pancoast, dated March 25, 1842.]

In your letter you mentioned the congestive fever that prevailed among us in this county; my notes were not made with much exactness, nor did I enter them in my regular note book, in consequence of their having been made from the first cases, and from my not having at the time considered it as a distinct fever, but one that was influenced by some local cause, and thus differing from the ordinary fevers cf the season. It afterwards invaded a great portion of our state, depriving us of many of our first citizens, and producing great terror in every neighbourhood.

On inquiring into the manner of their attack, I was informed that they had appeared drowsy for several days previously, and had frequently disturbed bowels, with copious discharges, which resembled in consistence and colour newly made cider, from sweetening apples, which discharges continued for several days, and for which calomel was generally given by some of the domestics—from ten to twenty grains—with no other effect than the addition of a sediment resembling the refuse of drained ashes. They also complained of pain in the head, back of the neck, and shoulders, and sometimes of pain in the region of the umbilicus. The temperature of the body was very high; the extremities were cold; the pulse 125, and labouring, as if the passage of the blood was difficult; mouth dry; tongue coated with a dark brown fur—in one case very smooth and shining—pulsations of the heart not felt at the lower portion of the sternum or sixth rib. The stethoscope enabled us to hear the circulation through the heart, which was very laborious, and indicated a dull and sluggish action; the liver seemed inactive, and sometimes so enlarged as to be felt below the ribs.

After the lapse of a few days from the cessation of the first diarrhœa, a second would supervene, the discharges containing scybala of the size of a hazle-nut or larger, preceded or accompanied by tympanitis, which was considered by many as a fatal indication. After its continuance for a day or two, the sufferer would shrink into a languid and almost insensible state, and the dejections pass involuntarily; and thus death would ensue,—the pulse being never below 125, and barely distinct at the wrist.

There was a peculiar odour through the entire disease, and a cessation of the secretions, with the urine scanty and high coloured. Medical aid was generally neglected until the cessation of the first diarrhœa, and the supervention of great heat of the body, with cold extremities; the heart labouring greatly. We resorted to venesection, to not more than ten ounces, in consequence of the want of tolerance of the system, and the blood ceasing to flow. Frictions, with flour of mustard, and other excitants were also employed; and after the lapse of a few hours there was a greater tolerance, so that the blood flowed much more freely, which generally restored the warmth of the extremities; but there remained a disposition to periodical returns of coldness of the extremities, which was met by the frictions and sulphate of quinia. This periodicity was more distinct in the advanced stage.

Owing to the irritability produced by calomel, I ordered the blue mass with Dover's powder—four grains of the former and ten of the latter, every two hours, until five or six were taken and a discharge was produced; the tympanitis and diarrhœa supervened after a few days, and from the scybala voided I was induced to use injections for their removal, with sinapisms over the umbilical region. The congested and dormant state of the liver was generally relieved by blisters over its region. In the collapsed state, which I found to be a general accompaniment of the disease, it became necessary to use tonics, viz. bark, &c.

I neglected to state that, in several cases, there was a slight eruption about the face, neck, and shoulders, resembling miliary pimples.

BIBLIOGRAPHICAL NOTICES.

Gerhard's Lectures on Diseases of the Chest.[1]

These Lectures were originally published in the "Examiner," of which the author is one of the editors. The volume is in double column, and in type as set up in the pages of that journal; hence, the author apologises in the preface for "numerous errors of style," and "for those typographical errors which may strike the reader;" and the apology merits reception. As much weight may not perhaps be given to the reason assigned by Dr. Gerhard for having made few or no references to authors, "these," he remarks, "seemed unnecessary, for the history of the diseases of the chest is so well known, that there is little difficulty in determining the source from which the recent discoveries have originated;" and he adds, farther on, "the lectures included in this volume contain the results of the author's observation, derived indirectly from the different authors who have written on the subject, but in all cases verified at the bedside or in the amphitheatre. They are not, therefore, properly a compilation, which would require a citation of authorities, but are immediately deduced from clinical observation."

It is immaterial what appellation is given to the work. It contains the results of the investigations of distinguished practitioners, in all cases, according to Dr. Gerhard, carefully observed and verified or disproved by himself; but such verification or disproval does not, in our opinion, deprive those preceding observers of the credit to which they are justly entitled, or diminish the propriety of citing them as authorities. It would have been important, too, we think, to the inquirer, that such reference should have been made, inasmuch as it would have enabled him to see whether the statement were made by others than the author, and to separate that which the author had suggested from that which had emanated from his predecessors and contemporaries. Besides, there are many topics in the work on which difference of sentiment still exists, and in regard to which it would have been proper to state that they are still unsettled. For example, Dr. Gerhard remarks that "passing from the root of the lung a gradual diminution is found in the loudness of the bronchial sound, but it is still heard as far as the summit, and much more distinctly on the right side than on the left. The difference in the two sides arises from the anatomical structure; for the tubes leading to the upper part of the right lung are shorter and larger than those going to the left, on which side the large bronchus passes under the aorta, and is therefore much longer and more tortuous than upon the right. The larger but shorter tubes of course approach much more nearly than the longer and smaller ones to the physical condition of the trachea, in which the air circulates with such freedom as to give rise to the loudest double blowing sound. The louder blowing sound exists on the right side, both at the anterior and posterior part; hence a given amount of induration of structure, which may tend to increase the loudness of this sign, will be much more perceptible on the right side than on the left—while, on the other hand, a perfectly natural peculiarity may be mistaken for disease. The blowing sound, if it be heard only on the right side, must be well characterised to become a sign of disease, and is not of much value unless combined with other corroborative evidence."—p. 29.

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[1] Lectures on the Diagnosis, Pathology and Treatment of the Diseases of the Chest. By W. W. Gerhard, M. D., Lecturer on Clinical Medicine to the University of Pennsylvania, Physician to the Philadelphia Hospital, Blockley, &c. &c. Large 8vo. pp. 157. Philad. 1842.

The reader would naturally conclude, from these observations, that no question could exist as to the fact of this difference of sides; yet Fournet —an excellent observer—has satisfied himself, that in persons presenting all the characteristics of healthy lungs, the sounds of inspiration and expiration are precisely identical in all corresponding points. In the few persons in whom he detected a slightly greater development of the expiration under the right than under the left clavicle, there were some motives for a doubtful opinion respecting the state of the lungs. M. Fournet expresses, indeed, the opinion from the physical condition of the two lungs, that there is no reason why they should furnish different respiratory sounds. Again, another practised auscultator—Stokes—dwells especially on the importance of the "discovery" made by him, that in many persons there is a natural difference between the intensity of the murmur in either lung; and in such cases, "with scarcely an exception, he found the murmur of the left to be distinctly louder than that of the right lung." It would appear, indeed, and such—as we have elsewhere said[1]—is the result of our own observation, that, at times, there is no marked difference between the two sides; that, at others, the intensity of the inspiratory murmur is greater on the right side, and at others on the left.

Again, Dr. Gerhard states, that in gangrene of the lungs, as an average result, about one half of those attacked die. "In hospitals, the mortality is rather greater, amounting to three fifths, while in private practice, it is probably about two fifths;" whilst, on the other hand, Dr. Craigie describes it as a disease, "the presence of which it is difficult to distinguish in the early stages from that of other diseases of the lungs; its determining causes are totally unknown; and it is not known that, in any genuine instance of it, the patient has made a recovery."

We are aware that there are indolent individuals in the ranks of the profession, who desire but the *ipse dixit* of the writer of any work, and who would rather not be puzzled by any conflicting testimony, preferring even error to uncertainty. Yet these, happily, are becoming daily fewer and fewer, and a deep and abiding search after truth, fostered by a well founded and judicious scepticism, is gradually dispelling the baneful influence of the *verba magistri*, under which medical science has so long suffered. We would, therefore, have greatly preferred the citation of authorities for and against many of the positions assumed by the author of the work before us; still, we find a sufficient excuse for the omission, not in the reasons assigned in the Preface, but in the fact, that it consists often of reports of lectures, in which we can readily comprehend such citation might not have been convenient or practicable.

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[1] Practice of Medicine, i. 225. Philad. 1842.

The greater part of the volume is occupied with lectures on diseases of the lungs; the remainder embraces diseases of the circulatory system; on all of which subjects there is much interesting and valuable matter. On the therapeutical portion—to which much less space is given than to the diagnosis—we would have made some comments, but our space will not admit of them.

The Western Lancet.[1]

This is a new candidate for the professional favour, of the West more especially. It appears in a good dress; and its execution is creditable to its editor. It consists of Original Communications, Bibliographical Notices, Miscellaneous Selections, and Intelligence, and an Editorial Department; and is to appear monthly, at three dollars *per annum*, payable in advance. "Uninfluenced," says the editor, "by sectional or party interests, and free from the debasing effects of *clique* government, we will in all sincerity endeavour to promote harmony and unity of action, and never permit our journal to become a medium for conveying off the *debris* of personal collisions."

We heartily wish Dr. Lawson every success.

Coates's School Physiology.[2]

This little volume strikes us as well adapted for the object which the author had in view. It contains, in epitome, an account of such phenomena, presented by the living body, and especially by that of man, as could be embraced with propriety in a work adapted for the instruction of the young. We can recommend it conscientiously and strongly to those who are engaged in the most honorable avocation of developing the powers of the youthful mind. We have repeatedly taken occasion to urge the importance of physiology as a branch of popular education, and are gratified to learn, that this view is becoming more and more embraced by the intelligent part of the community, under whose combined opinion all important charges in public instruction are sooner or later effected.

Trimmer's Geology and Mineralogy.[3]

This work does not appertain directly to the profession of medicine. Yet it is on a subject with which every physician ought to be more or less acquainted. Perhaps there is no one, which is more magnificent than Geology. It assuredly is second to none, unless we except Astronomy.

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[1] The Western Lancet, devoted to Medical and Surgical Science. Edited by Leonidas Moreau Lawson, M.D., May 1842. 8vo. pp. 28. Cincinnati, 1842.

[2] Physiology for Schools. By Reynell Coates, M.D., Corresponding Member of the National Institution, Washington City, and the New York Lyceum of Natural History, Member of the Academy of Natural Sciences of Philadelphia, &c., &c. Second edition revised. 12mo. pp. 333. Philadelphia, 1842.

[3] Practical Geology and Mineralogy; with Instructions for the qualitative analyses of Minerals. By Joshua Trimmer, F.R.S. 8vo. pp. 528.

The work before us is excellently well adapted for the student of Geology and Mineralogy. It has not the redundancy of larger works, and yet it is sufficiently ample as an introduction to the whole subject, and is well worthy of the attention of those whose minds have recently been attuned more especially to the subject, by the able lectures that have been delivered in some of our principal cities. It is illustrated by numerous wood cuts.

Vegetable Physiology.[1]

The number of physiological works to which we have had, from time to time, to attract the attention of our readers, sufficiently exhibits the growing taste for this species of philosophical inquiry. There was wanted, however, in our book stores, an elementary work on vegetable physiology. This want is well supplied by the work before us. It is written expressly for non-professional readers, and is consequently adapted for all—the language being clear, the style good, and the illustrations—which are numerous—entirely appropriate.

We can recommend its perusal strongly to our readers, and are of opinion, that it might be adopted, with much propriety, into our public and other schools.

Carpenter's Human Physiology.[2]

This work exhibits all the mental characteristics of Dr. Carpenter—great knowledge of what has been done by others; clearness of conception, and lucidness of arrangement. Although entitled "Human Physiology," many of its details are on Histology and Histogeny, or on the minute anatomy, and development of tissues, which man possesses along with the rest of the animated creation. They, however, who are fond of such investigations—and who is there that is not more or less so—will find the transcendental as well as the more sober views of modern inquirers, well depicted, and we are consequently pleased to see it advertised amongst the forthcoming publications of the enterprising house of Lea & Blanchard of this city.

It may not be improper in us to remark, that Dr. Carpenter, in his preface, alludes to several works, the results of a large proportion of which he states have not been included in any previous publication on Human Physiology. Several of these had, however, been incorporated into the last edition of our own "Human Physiology," which has been before the profession ten months. This had not, however, reached Dr. Carpenter, as, whenever he alludes to the work, it is to the third edition, of 1838.

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[1] A Popular Treatise on Vegetable Physiology, published under the auspices of the Society for the Promotion of Popular Instruction, with numerous cuts. 12mo. pp. 302. Philadelphia, 1842.

[2] Principles of Human Physiology; with their chief applications to Pathology, Hygiéne, and Forensic Medicine, especially designed for the use of Students. By William B. Carpenter, M.D., Lecturer on Physiology to the Bristol Medical School, &c. 8vo. pp. 680. London, 1842.

MISCELLANEOUS NOTICES.

Medical College of Ohio, and Willoughby Medical School—Dr. Kirtland.—Dr. Kirtland, Professor of the Theory and Practice of Physic in the Medical College of Ohio, has resigned the office, and accepted the chair on the same branches in the Willoughby Medical School.

We observe that the Trustees of the former school have given notice in the public prints, that no appointment will be made prior to the 15th of June, and that application should be made to D. K. Este, Esq., President of the Board, by those who are candidates for the situation.[1]

New York Insane Hospital at Utica—Dr. Woodward.—This gentleman, of whom we have so often made honourable mention—has been elected Superintendant and Physician to this great Asylum for the Insane Poor. When will it be permitted us to congratulate this community, and the cause of science and philanthropy in general, on the completion of a similar undertaking in Pennsylvania!

Credulity of the People in regard to Remedies.—It is not surprising, that the most ridiculous views in regard to medical theories and practice should prevail amongst the people, and that they should be ready to run after the practisers of any novel system, no matter how preposterous it may be, when we observe the amount of superstition and credulity that exists to a greater degree of course amongst the ignorant, but to a certain extent likewise amongst those that are better informed. Hence the hydropathist and homœopathist, the uroscopist and the Thomsonian find dupes enough for their mercenary purposes.

It would scarcely be credited were it not notoriously the fact, that the fortune teller is constantly consulted; and that there are many who believe that a person in a state of magnetic sleep can inspect the very entrails and pronounce as to their healthy or diseased condition!

Within the last few days, and in and near this enlightened city of Philadelphia, two cases have occurred, which do not speak strongly for the "march of mind" in these respects. The child of a respectable individual was recently bitten by a dog, which was supposed to be rabid. The father very properly invoked medical aid from the city, but in the mean time it was advised that a person, who had been very successful in the prevention of hydrophobia under similar circumstances, should be permitted to *prescribe*, which was agreed to. Accordingly, he directed an infusion of a common and innoxious vegetable; and farther, that a paper, on which was written the following jargon, should be swallowed three times a day:

Packs		Mocks		Packs
Packs		×		Mocks
Erin	×	O	×	Bocks.

The second case was one of porrigo on the leg, for which we were consulted by a respectable young Irish woman; the tar ointment was prescribed, under which the eruption improved. She was persuaded, however, that it could be permanently cured by one person only, who had gained great reputation by removing cutaneous diseases by simply *spitting upon them.* Our patient subjected herself to one single *operation:* and the whole benefit was ascribed thereto!

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[1] The Western Lancet, May 1842. p. 48.

Can we be surprised at any exhibition of credulity, when we know positively of the existence of such humiliating examples!

Cooper's Surgical Dictionary.—Dr. David M. Reese, Professor of the Theory and Practice of Physic in the Castleton Medical College, Vermont, is engaged in preparing for the press a new edition of Cooper's Surgical Dictionary. He proposes to add a supplementary appendix, in which he will record the improvements and operations of American surgeons since 1830—the date of the former American edition—together with a summary of all the new matter which Mr. Cooper has introduced concerning transatlantic surgery during the same period.

Pennsylvania Hospital—Dr. Pepper.—The Board of Managers of the Pennsylvania Hospital have elected Dr. Pepper to the office of Physician to this institution, in the place of Dr. B. Coates, resigned. Dr. Pepper is a zealous and practised pathologist; full of enthusiasm in the profession of his choice; who has had ample opportunities both at home and abroad for developing his natural endowments, and for becoming a well informed and able physician.

College of Pharmacy—Dr. Bridges.—The office of Professor of Chemistry having been vacated by the resignation of Dr. William Fisher, we are gratified to find, that it has been bestowed upon Dr. R. Bridges, of this city, well known as an excellent chemist.

University of Maryland—Dr. Roby.—Dr. Joseph Roby has received the appointment of Professor of Anatomy in the University of Maryland.—*Boston Med. and Surg. Journal,* May 11, 1842.

New York Society for the Relief of the Widows and Orphans of Medical Men.—We are pleased to see a movement in this praiseworthy direction made in New York by some of the most respectable members of the profession; and although, from the programme submitted to the meeting, the contemplated relief is intended to be but small, it is the commencement of a noble scheme, and may be more fully matured hereafter. We shall look with much interest to the further developments, which, we trust, may be entirely successful.

Ileus, in consequence of Hypertrophy of the Pancreas, producing Stricture of the Duodenum.[1]—A country gentleman, of strong appearance, had felt for six or eight months, a sense of weight in the region of the stomach and navel, which prevented him moving at all after eating, as this gave rise to great uneasiness; he was in the habit of drinking great quantities of water, and experienced much relief from eructation. Four days previous to N. (narrator of the case,) seeing him, which was on the 20th July, he had indulged rather freely at an entertainment in the neighbourhood, and after having driven home somewhat late at night, he took a vomit, with effect; but instead of being relieved, he became gradually worse, and soon presented all the symptoms of ileus, without any of those of inflammation. Despite of the usual remedies, he died 22d July.

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[1] Hannover. Annalen, Bd. v. 2 Heft. and Lond. and Edinb. Monthly Journal of Med. Science, April, 1842, p. 390.

Autopsy.—There was no trace of inflammation, nor of effusion into abdomen. The pancreas, however, had lost its natural appearance, and exhibited a soft succulent fleshy aspect, without any scirrhous or tuberculous deposition; it was enormously hypertrophied, being almost as large as the head of a fœtus of four months old, and had so completely inclosed almost three inches of the duodenum, that this had become so narrowed as hardly to admit a goose quill. Between this stricture and the pylorus, the duodenum was expanded into a sort of second stomach, where, no doubt, the contents of the stomach remained, until so diluted as to pass the stricture; hence the patient's insatiable drinking propensity.

Case of Complete Obliteration of the Aorta. By Dr. Roemer, Professor of Anatomy at Vienna.[1]—An officer, high in rank in the Austrian army, who had served during the war from 1770 to 1815, and had always enjoyed good health till his 45th year, went at that time to reside at Mayence. He then suffered frequently from dyspnœa and gastralgia, but did not apply for medical advice until he had had several attacks of threatened suffocation, and his stomach had refused to receive every kind of food. During a year he was treated homœopathically, without benefit. Severe palpitations then came on, accompanied by œdema of the extremities. The continued use of bismuth and digitalis made the dyspnœa and vomiting almost entirely disappear, but the pulse continued rapid, vibrating, and full. As his decease approached, he was seized with hoarseness and a small dry cough; and at last he expired suddenly in his fiftieth year, while playing at whist.

Post-mortem examination.—The contents of the cranium were healthy, with the exception of a softened and exsanguine state of the brain, and ossification of the basilar artery. Four ounces of serum were found at the base of the skull. The heart was considerably hypertrophied; the valves were healthy. The aorta, as far as the origin of the arteria innominata, was much dilated, which latter was almost twice its normal size. The subclavians and the left carotid artery did not appear unnaturally large. The coronary arteries were ossified to the extent of about three inches. From the origin of the arteria innominata, to the point where the ductus arteriosus enters, the aorta became gradually smaller, and at this latter spot the diameter did not exceed half an inch; it was there found obliterated to the same extent; its thoracic and abdominal portion was hardly as large as that of a child ten or twelve years old; the walls of these vessels were evidently thickened. The intercostal arteries, which arose below the obliteration, had nearly the diameter of a quarter of an inch, and communicated freely between the third and fourth ribs, with the mammary and thoracic arteries. It was by means of these anastomoses that the collateral circulation was established; the pulmonary arteries were greatly dilated; the left laryngeal recurrent nerve was greatly stretched, and the turn which it makes round the aorta corresponded to the obliterated point of that vessel. Biliary calculi were found in the gall-bladder. The lungs and other organs were healthy.

A case of Poisoning with Laudanum. By Casper Morris, M. D., of Philadelphia.[2]—Mrs. A. intending to administer a dose of oil to her infant, four months old, to prevent griping, attempted to add to it two drops of laudanum. It escaped more rapidly than she wished from the vial, but supposing from the appearance, there might be about three drops, she gave it at a venture. The child soon fell asleep, and though it appeared nervous and twitched frequently, she felt no uneasiness till it was seized with convulsions, about three hours after the dose had been taken. I was then sent for, and found it with general convulsions, stertorous breathing, hot skin, pupils contracted to mere points—the stupor was so deep that it could not be aroused by any efforts I could make. I at once administered a dose of sulphate of zinc, which I had carried with me, and enema of strong salt and water hourly, a part of which was retained without exciting the least sensation. On examining the laudanum bottle, I found there were about twenty drops remaining at the bottom of an ounce vial, the sides of which were coated with a deposit of opium; the little fluid at the bottom being very turbed, and containing many fragments of opium of considerable size. I at once come to the conclusion that we had no means of estimating the amount of opium taken. In the first place, the uncertainty as to the number of drops, was very great; any one who has dropped laudanum into castor oil, may have observed how very deceptive is the appearance it presents. In addition to this cause of uncertainty, the turbed fluid was of much greater strength than the clear filtered tincture; but above all, the probability that a portion of solid opium had escaped with the fluid was so great as to amount almost to certainty. Under these circumstances, the stomach being little likely to respond to the impression of remedies, I introduced a large catheter into it, and injected a quantity of warm water. This was promptly returned through the tube, (and I may remark in passing, that I have before witnessed the same result,) so freely and promptly, that there was no occasion for any effort to draw it off by the syringe. The water was returned perfectly pure; there was, however, no mitigation of the symptoms. In the meanwhile mustard cataplasms had been applied to the extremities, and iced water repeatedly dashed upon the head, but neither was sufficient to arouse the child. On the contrary, the respiration became more slow—the skin cold, and the consciousness diminished. I had the child placed in a warm mustard bath, which excited one cry, the first and only token of sensation manifested for many hours. Dr. Hodge, who had been summoned to my aid, arrived at this juncture. The coldness of the surface and tokens of prostration becoming urgent, we agreed to administer brandy and water. In the effort to swallow the first tea-spoonful, convulsions set in, whether caused or not by some drops insinuating themselves into the larynx, it would be difficult to say.—Convulsion after convulsion ensued, destroying the power of deglutition entirely. Fearing, lest in the passage of the tube into the stomach for the purpose of stimulating the child by a continued use of the brandy, the spasm might be aggravated, we threw a table-spoonful of brandy mixed with a cupful of warm water into the rectum. The surface still continued cold; there was not even heat of the head; the breathing was much interrupted—the face livid. A warm mustard bath was again resorted to, but without any effect; the child was indeed taken from it, as we thought, moribund. The spasm increasing in violence, the action of the heart alone indicated the retention of life. While Dr. Hodge was employing friction to the body, I thrust my finger into the mouth, and found the jaw rigid and the tongue thrust forcibly backward and upward against the palate. It occurred to me at the moment that even if an effort at respiration should be made, all access of air to the lungs was effectually prevented by this condition of the mouth; placing, therefore, two fingers upon the tongue and the thumb between the jaws, I held it forciby open, at the same time requesting Dr. Hodge to compress forcibly the chest and belly so as to empty the lungs: this was repeated frequently, the elasticity of the cartilages, and the descent of the diaphragm causing air to be drawn into the lungs. This was repeated for at least three minutes, action of the heart only giving indication of the presence of vital power. At length a long sigh was drawn and natural respiration re-established. Still the surface remained cold, and there was no manifestation of a diminution of the influence of the opium, although between six and seven hours had elapsed since its administration. A large sinapism was applied to the anterior part of the body, which speedily induced redness, but without exciting the sensibility of the patient. It was then removed to the back without any more favourable result. Cold air was blown upon the face repeatedly with equal want of success. The mustard failing to excite permanent warmth, at the suggestion of Dr. Hodge, linen cloths were heated at the fire and applied so hot, that it was with difficulty they could be retained in the hands; by this means an artificial heat was communicated to the skin and the congestion of the great vessels relieved, the body soon becoming red as though covered with a vivid eruption. Before this was finally effected, convulsions again occurred, producing the same suspension of the respiration, and coldness and lividity of the surface, and this time there was *no perceptible action of the heart.* We all thought the child dead. The same process was again resorted to for the purpose of inflating the lungs, with the addition of blowing into the throat whilst held open. So satisfied was I that the case was past recovery that I should have abandoned it as hopeless, but the active and untiring zeal of Dr. Hodge was not so easily subdued, and we persevered again, and were both astonished and delighted to witness the re-establishment of natural respiration. For several hours we persevered in the application of the hot linen cloths—certainly the most effectual way of imparting heat to the body—and at ten o'clock at night, just eleven hours after the dose had been given, we left the child crying heartily for drink, and by the next morning it had entirely recovered from all the consequences of the dose.

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[1] Arch. Gén. de Médecine, Dec. 1841, and Lond. and Edinb. Monthly Journal of Med. Science, April, 1842, p. 391.

[2] Quarterly Summary of the Transactions of the College of Physicians of Philadelphia. February, March and April, 1842.

Dr. Condie suggested whether the case related by Dr. Morris, was not one in which the establishment of artificial respiration, as practised by Mr. Charles S. Smith, in an instance recorded in the twentieth volume of the London Medico-Chirurgical Transactions, would have contributed to a more prompt restoration of the vital functions, or at least have been an additional means of securing the final recovery of the patient. Dr. C. believed that in very many cases of poisoning by opium and other narcotics, the employment of artificial respiration would most effectually contribute to the success of the other means resorted to, if not in itself sufficient to prevent a fatal result. He should not, himself, hesitate, where the artificial inflation of the lungs could not otherwise be effected, to make an opening into the trachea for the introduction of a tube.

Dr. Parrish remarked that the present case was a peculiarly interesting one, in consequence of the complete restoration of the powers of life, after the entire cessation of the action of the heart and lungs. The length of time during which the vital functions may be suspended, with the possibility of their subsequent restoration, has been the subject of considerable discussion. In the case just related, the cessation of the entire functions of respiration and circulation continued, as it appears, but for a few minutes, and Dr. P. believed, that there was no well authenticated instance of resuscitation in cases of asphyxia from submersion, where the suspension of respiration has continued longer than three or four minutes.—Instances have been related, it is true, in which resuscitation is said to have taken place after a body has been fifteen to twenty minutes under water, but it is evident, that, in these instances, there is a positive mis-statement as to the time the body has remained in the water. It may be very confidently asserted, that after the lungs have ceased acting for five minutes, every effort to again rouse them into action will be in vain. This is the opinion of Dr. Edwards, whose recent experiments and observations constitute the highest authority on this subject.

Dr. Pepper observed that a careless observer might too readily be lead into error, as to the period during which the lungs and heart have ceased to act, in cases of poisoning with opium, in consequence of the extreme slowness and feebleness with which their functions are often performed for some time before they cease entirely.

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Art. I.—NEW MODE OF TREATING HYDROCELE.

By J. Pancoast, Prof. of Anatomy, Jefferson Medical College, Philada.

My dear Doctor,—I send, at your request, the following notice of a new mode for the cure of hydrocele in children:—

Hydrocele in children, even where the opening has been closed, that led from the tunica vaginalis to the cavity of the abdomen, is a disease of frequent occurrence. In early infancy strong discutient lotions will usually suffice for its cure. But after the second year, some more efficient means are required to produce this result. Mere evacuation of the serum with a common lancet or trochar, or a number of punctures made into the sac with a large needle, so that the fluid may escape into the cellular tissue of the scrotum, and be subsequently removed by the absorbents, are the modes of cure commonly relied on. But I have found them so uncertain in their result, success in many cases being attained only by a repetition of the process, that I have latterly adopted the following plan of treatment, which in three cases that I have tried it in has proved perfectly successful.

I puncture the swelling, in front and below its middle, with a common thumb lancet. When the serum is discharged a little pressure causes the serous or vaginal tunic to protrude in the form of a small cyst. This I lay hold of with a pair of forceps, and draw it out, as far as it will admit. I then divide the lower half of the cyst next the skin with a pair of scissors, and traction again being made upon the pedicle, still more of the tunic may be drawn out from the upper portion of the scrotum, which is nipped partly off and treated in like manner as before. I repeat this process, while any portion of the vaginal tunic can be made to readily protrude at the opening, so as to be laid hold of with the forceps. I then surround the side of the scrotum and the testicle involved with strips of adhesive plaster, after the manner of Fricke of Hamburg for the cure of hernia humoralis. By this means, the cellular tissue of the scrotum (the tunica vaginalis reflexa having been removed, to a considerable extent, with the forceps and scissors) is brought directly into contact with, and ultimately becomes adherent to that portion of the vaginal tunic which is closely attached to the fibrous coat of the testicle.

The child is allowed to run about as usual, and in a few days is perfectly well. Excepting as regards the puncture of the skin, the operation is entirely devoid of pain.

This plan of cure will, I think, be generally found applicable in children. It is certainly more speedy and certain in its results than any measure short of injection of the sac, which is not usually practised in children.

It would also, I think, be found successful in the recent hydrocele of adults, before the tunica vaginalis reflexa has become so coriaceous, or been so thickened by disease, as to prevent its being drawn out in the form of a cyst through a narrow opening. In one instance, where the puncture or palliative process had been several times tried without success, and in which I feared I might find a thickened membrane, I made the puncture through the skin with a curved bistoury, and pushing it on to the top of the sac, divided with the point of the instrument as I withdrew it the anterior wall of the tunic, laying open the subcutaneous cellular tissue of the scrotum, but not cutting the skin. Subsequently, no difficulty was encountered in drawing out the tunic and removing it with the scissors.

Very sincerely, yours, &c.

April 20, 1842. J. Pancoast.

Since writing the above, I have operated upon another case in the same manner, in which the passage leading to the cavity of the abdomen had remained open. The cure in this instance has been slow and gradual, occupying about a month, and without the aid of a truss. The fluid re-accumulated in the tumor during the first week, but it was gradually absorbed, adhesion beginning below and proceeding upwards, till a radical cure was established. J. P.

June 8, 1842.

Art. II.—CASE OF DROPSY DEPENDENT UPON DISEASE OF THE HEART.

Reported by E. J. Bee, M. D., and John Staige Davis, M. D.

Resident Physicians to the Philadelphia Hospital.

[The following case is an example of a large class, in which dropsy is dependent upon disease of the heart, and in which during life the physical signs indicate the main pathological lesions.—Ed.]

Thomas M'Grath, aged 44, a labourer.—The patient says that he has enjoyed good health until about thirteen years since, when he had an attack of articular rheumatism while working in Washington, D. C. Whilst labouring under this attack, he was seized with dyspnœa and acute pain in the region of the heart. The latter, as well as the rheumatic pains, gradually yielded to appropriate treatment, but slight dyspnœa continued. Four or five years subsequently, he had another attack of rheumatism, affecting his knees and shoulders, from which he recovered.

In October 1841, he entered the hospital, in consequence of the pains recurring in his knees and thighs. He remained in the ward four weeks, and was discharged much relieved. He re-entered the house on the 10th of December following. He states that several weeks previously, while at work, and apparently well, he was seized with vertigo, which continued for three weeks. At the end of this time, the dyspnœa, to which he had been more or less subject since his first attack of rheumatism, increased. At the period of his entrance, he presented the following symptoms—dyspnœa and palpitation, aggravated by ascending stairs or by any violent muscular exertion; decubitus on the right side and elevated; some dilatation of the nostrils; cough, with a reddish glairy expectoration, somewhat resembling pneumonic sputa. The face and lips are of a bluish tint; the respiration is 36 in the minute, and laboured. Appetite indifferent, bowels regular; pulse 104, corded, and moderately resisting. The left side is slightly dilated over the præcordial region; the veins of the neck are distended. There is imperfect pulsation of the carotids, and general fulness of the capillaries. On the left side anteriorly, percussion is clear, except in the præcordial region, where it is flat; on the right side, it is clear in the upper half, but dull below. Respiration on the left side is vesicular; on the right side, also, vesicular in the upper half of the lung, inferiorly bronchial, with crepitant rhonchus. The impulse of the heart is exaggerated; both sounds are diminished, the first, however, being less distinct than the second; at the apex there is a rasping sound, synchronous with the systole of the heart. Posteriorly, percussion is clear on the left side throughout; on the right side, dull in the inferior one-third; elsewhere it is resonant. The treatment consisted in venesection (℥xij); and in small doses of calomel and ipecac. (gr.ss of the former, and gr. two-thirds of the latter every hour, till the system was affected.) He was discharged January 28th, cured, and again entered the wards on May 4th, presenting the following symptoms: some anxiety, but no marked discoloration of the countenance; respiration, abdomino-costal, regular, 30 while sitting; the pulse large and firm, requiring strong pressure to obliterate it; 90 in the sitting posture. The legs are much infiltrated with serum as high as the knees; slight œdema of the thighs and abdominal parietes. There is slight pulsation perceptible in the veins of the neck, which are empty during inspiration and filled in expiration. The chest is more expansible on the right side anteriorly than on the left; the latter is also less developed, except in the præcordial region. The left clavicle is unduly prominent, owing to an old fracture.

Percussion.—The right side is obscurely resonant in its upper third, and almost flat below, the liver extending as high as the fourth rib; the left side is preternaturally resonant, except in the præcordia. Respiration on the right side bronchial beneath the clavicle, the inspiration being feeble, the expiration strong and blowing; elsewhere it is rude, and a subcrepitant rhonchus is occasionally heard. The resonance of the voice is slightly increased; on the left side, the respiration is strongly bronchial beneath the clavicle; and is heard feebly over the greater part of the præcordial space; elsewhere it is rude.

Heart.—There is dulness on percussion beneath the right clavicle from within an inch of its left extremity, laterally to the left four inches; and on the line of the nipple there is dulness, from the junction of the fourth right rib with its cartilage to the left, in an extent of ten inches. The impulse of the heart is forcible at a point two inches below, and one to the left of the left nipple, where both sounds are heard. The first is long, protracted, and dull; the second is short and unaccompanied by any murmur; both sounds are heard between the third and fourth ribs along the middle of the sternum, the second being very clear and bell-like. Perfect flatness extends (by percussion) from the upper margin of the fourth rib, downwards, the length of the sternum, and from the middle of the sternum to within half an inch of the left nipple.

Posteriorly.—The left side is more developed than the right; percussion is obscure on the right side, more resonant on the left. Respiration at the summit of the right lung is bronchial, with crepitant rhonchus during inspiration; elsewhere it is rude. On the left side respiration is rudely vesicular at the summit of the lungs; tubal at its roots, and strongly vesicular below. The liver extends, as before remarked, from the fourth to the last false ribs. The tongue is moist; there is no pain in the lumbar region; the urine is passed without pain or difficulty, is copious, of a pale straw colour, yielding an abundant precipitate when heat is applied, or on the addition of nitric acid; this precipitate is of a reddish brown colour, and, after standing a few hours, separates into a pearl white matter, which subsides, and into a pink coloured flocculent portion, which remains suspended.

His treatment consisted in the administration of tincture of digitalis, ten drops three times a day; of purges of acetate of potassa, or of jalap and cream of tartar alternately, every other day: the infusion of chimaphila was directed as his drink: he took calomel, squills, and digitalis until the constitutional effect of the mercury was produced; and occasionally, as circumstances required, venesection, topical depletion (to the præcordia) and counter-irritants were resorted to. He was discharged in July.

The remainder of the report is by Dr. Davis.

About the middle of November he returned for the last time; he had remained in the house since his discharge, and, for three or four weeks previous to his entrance into the wards, had been compelled to work at the pumps: the violent exertion induced the return in an aggravated form of his heart affection. At the time of his admission, he laboured under great dyspnœa and palpitation on the slightest movement; the action of his heart was very violent and heaving, the first sound was prolonged, and a bellows-murmur accompanied the second sound. He was relieved by free and repeated local depletion, and by the internal administration of small doses of tartar emetic frequently repeated; he also took the tincture of digitalis in the dose of ten drops three times a day: subsequently (towards the close of the month) a blister was applied to the præcordia; and counter-irritation kept up by tartar emetic ointment; by these means, the action of his heart was much modified, and his condition rendered one of comparative comfort. Early in December, his feet and ankles became œdematous, but the œdema was dissipated by the application of a bandage. In the latter part of the same month, he had an attack of bronchitis, which was regarded, however, as a symptom of the hydropic condition, from which he suffered more or less till within a few weeks of his death. To relieve it he took from time to time various expectorants with some benefit. From this time (toward the close of December), the first sound of the heart was generally absent, occasionally returning for a time, but even then being barely perceptible; the bellows-murmur in the second sound continued.

From the middle of February we may date the commencement of his final decline, and the occurrence of marked symptoms of obstructed circulation; the œdema of his inferior extremities reappeared, and, notwithstanding the employment of active hydragogue cathartics, (consisting principally of jalap and bitartrate of potassa), slowly but steadily increased: toward the close of the month, fluctuation was perceived for the first time in the abdomen. Recourse was then had to diuretics; he took small doses of calomel and squill, till slight ptyalism was produced, and drank freely a solution of bitartrate of potassa in juniper tea: these, although they augmented considerably the secretion of urine, did not retard the progressive accumulation of fluid, both in the cellular tissue and peritoneal cavity. During the months of March and April, these symptoms gradually increased; his respiration becoming more and more impeded, and his decubitus more elevated; the difficulty of respiration amounted to orthopnœa in the forenoon. His urine, which had been slightly albuminous since his entrance into the ward, became highly so during the last month of his life. A few days before his death his inferior extremities were enormously distended, and erysipelas commenced on the inner surface of his thighs.

He died on the 19th of April.

Necroscopy 38 hours after death. *Thorax*—Considerable effusion into the pericardium. *Heart* much enlarged, its length being six inches, and its circumference at its base twelve inches. Left ventricle hypertrophied and dilated; thickness of parietes at middle fourteen lines, length of cavity four inches. Mitral valve—Portions of its investing membrane are opaque, but the valve is flexible and entirely able to perform its functions. Semilunar valves of the aorta:—ossific deposit on the internal coats of the aorta immediately above and below the valves; cartilaginous thickening of the adherent margin of the latter. In one of the sinuses of Valsalva, on the internal surface of the artery, is a circular concave ossific plate, five lines in diameter, the concavity presenting internally. On one of the valves, there are numerous ossific spicula, particularly along its line of attachment; these, though they impair its flexibility, do not prevent its closing. The aorta in its ascending portion presents a patchy redness of its lining membrane, beneath which are numerous points of steatomatous deposit. The left auricle is much dilated. Right ventricle:—length of cavity three and a half inches; thickness of parietes at middle four lines; tricuspid valves healthy. Right auricle enormously dilated, of sufficient capacity to contain an orange. Pulmonary valves healthy.

Abdomen.—Immense effusion into the cavity of the peritoneum of a dark red colour. Liver enlarged: right lobe much softened; when shaken undulates like jelly; in feel and texture resembles the spleen: left lobe similarly affected, but in a less degree. Kidneys softened, with granular deposition in their cortical portion. On the external surface of the right ventricle there is an opacity of its investing membrane in an extent of about two square inches.

Lungs.—Right lung united to the parietes of the chest by extensive and close adhesions; texture of the lung healthy. Left lung also adherent to the pleura costalis; emphysematous in its upper middle lobe, elsewhere normal.

ART. III.—ON THE ORIGIN AND DEVELOPMENT OF THE DISEASED CONDITION OF THE INTESTINAL GLANDS, WHICH OCCURS DURING THE COURSE OF CERTAIN FORMS OF CONTINUED FEVER.

BY JOHN GOODSIR, ESQ., Member of the Med.-Chir. Soc. of Edinb. &c.

(Read before the Med.-Chir. Soc., February 1842.*)

Without entering upon the question, as to whether the subject of the present paper constitutes a distinct species of disease, or be merely a form of the ordinary continued fever,—a question which I am quite satisfied will never be answered, so long as each pathologist confines the inquiry to the fever of his own district, without connecting with it the consideration of those forms of fever which occur in every separate district of a country or continent,—I shall proceed at once to describe a lesion which I observed some time ago in a disease which I was led to consider as typhous or continued fever.

On opening the abdomen of individuals who had died of this fever, we could always recognise the diseased condition of the internal surface of the gut, by the elongated bluish purple spots on its peritoneal surface, corresponding to the glands of Peyer on the internal surface; and this we could do, even in those cases in which, from other circumstances, the vascularity of the parts had disappeared after death.

On laying the gut open, the patches of Peyer's glands exhibited, according to the standing of the case, the various appearances which I shall now describe.

But before proceeding to detail the phases through which the patches pass, from the first appearance of the disease till the establishment of the typhous ulcer, or of perforation, I may remark, in regard to the condition of the mucous membrane in the neighbourhood of the patches, that it did not in every case exhibit unequivocal traces of inflammatory action. It might be highly congested, or it might be perfectly bloodless in cases of well developed disease of these patches. I cannot say that I have often observed the mucous membrane pulpy or softened. The villi and follicles of Leiberkuhn have always appeared to me to be healthy. The vascularity, when it did occur, was met with principally in the neighbourhood of the glandular patches, and resembled in all respects that described and figured by Dr. Bright in his report on the form of fever lesion now before us.

The commencement of the disease is first announced by the smaller patches becoming slightly elevated, so as to be hemispherical or conical, and by the more extended groups assuming a table-like appearance, with perpendicular edges, as if a flat plate had been placed on the mucous surface. The colour varies according to the case, from bright carmine red, to dark purple or black, continuous, or in patches. In the more vascular specimens, the colour is a yellowish gray, contrasting with the dead white or grayish white of the intestinal surface. More closely examined, the surfaces of the patches exhibit, as usual, the follicles of Lieberkuhn and villi, differing in no respect from those on a healthy surface, and arranged around the vesicles of the patch in the usual manner. An examination of this kind must be made under water, and when conducted in this manner, the vesicles of the patch may be seen, by floating aside the membranous border and circle of villi which surround each of them. The vesicles themselves may thus be seen to be much distended with a yellowish matter—a distention which is now perceived to be the immediate cause of the elevation of the patch.

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* London and Edinburgh Monthly Journal of Medical Sciences, April 1842, p. 353.

In the second stage of the disease, the patches still continue to rise above the surrounding surface, and to exhibit the changes formerly described, in a more characteristic manner. As the elevation increases, a change begins to take place on the elevated surface. This change may be partial, that is to say, it may take place sooner on some parts of the patch than on others, but generally it extends over the whole surface, and is bounded by a line situated from a tenth to a sixteenth of an inch from the edge of the patch. The change itself consists in the surface beginning to alter in colour, becoming dirty yellow or gray, and assuming a peculiar undulating or contorted surface, like a bit of leather seared with a hot iron. The villi have now in a great measure disappeared, but the orifices, or rather the circular folds, or pits, in which are situated the vesicles, are still visible. At last, the confines of the changed portion of the patch are rendered evident by a groove apparently produced by ulceration, which, appearing here and there on these confines, at last extends all round, and indicates some change about to take place in the whole arrangement of the parts.

In the third stage, the groove just described makes its way into the tissues; and as it does so, the healthy but elevated mucous membrane on its external edge, gradually everts itself, as if by the upward pressure of the matter beneath it. While this is going on, the edges and surface of the altered portion become more rugged, and their former character somewhat obscured. The altered portion which now assumes very much the appearance of a slough tinged with intestinal matters, becomes more and more detached from the surface to which it adheres. When the mass is gently raised under water, it may be observed that its attached surface sends processes down into the cellular membrane beneath; and if these processes be carefully drawn out, they will be found to correspond each with one of the original vesicles of the patch. When detached in this manner, they leave on the surface to which they adhered, dimples, or rather pits, which may be recognised as being the cellulo-vascular sheaths of the patch vesicles.

Occasionally the free surface of the altered portion comes away first, in the form of flocculent laminæ, and the deep processes continue to be attached for some time in the cellulo-vascular capsules, like little nodules or pellets of a rounded or pyriform shape.

The altered portion, even immediately before detachment, may still present on its surface traces of its original structure. The orifices of the follicles in which the vesicles are situated are visible here and there on the surface, and the membrane retains sufficient consistence to bind the mass together.

Fourth stage. When the sloughy mass has separated, the surface of what may now be called an ulcer appears flocculent; but, when examined under water with a couple of needles, a number of foveæ, the remains of the cellulo-vascular capsules, may be observed on it. In some of these, the little pellets of deposit may still remain attached, appearing like mustard-seeds scattered over the surface. The edges of these ulcers are thick and everted, and exhibit the natural structure of the mucous membrane. In some ulcers the eversion of the edges proceeds so far as to throw the mucous surface of the edge completely over, so as to apply it to the surrounding mucous membrane.

Fifth stage. The ulcer may now heal, or proceed to perforation of the gut. In the former case granulations, I presume, appear, and the reaction of these cellular elements carries on the contraction and cicatrization so well displayed in some of the preparations on the table. In the present form of ulcer, as in others affecting the mucous coat of the bowels, it is some time before villi again make their appearance on the cicatrized surface; but these changes I have not watched or observed. When the ulceration proceeds towards perforation, it is generally one spot of the patch which is more particularly affected, the rest of the ulcer retaining its former granulating or flocculent appearance. At this stage of the process lymph begins to be deposited on the external surface of the gut; and if the patient survives the perforation eight or ten hours, the lymph rounds off the edges of the hole, and gives it that punched-out appearance so frequently observed. The omentum may adhere opposite the incipient perforation, and after contraction has concluded, it appears as if it had been forced from without into the hole, an appearance resulting from the contracting agency of the granulations.

Having now described the changes which the patches undergo in this form of disease, I have to point out the peculiar matter upon the presence of which these changes appear to depend. The gray matter which fills the vesicles or the spaces which they occupy, I find to consist of that universal element of every primitive tissue, healthy or diseased, nucleated cells. These cells are from 2000 to 4000 of an inch in diameter. They do not in general exhibit a nucleus in the sense in which that term is generally applied; that is, the individual cells do not present in their interior smaller cells holding certain relation to them. These cavities appear to contain a number of granules, four, five, or six, as far as could be reckoned. Whether these in the aggregate are to be considered as a nucleus proceeding towards the formation of a number of young cells, or whether the appearance is to be considered as analagous to that irregular form of nucleus and cell-contents characteristic of certain forms of tubercle, I do not know. This matter, of whatever nature it may be, appears first in the vesicles of the patches, and then spreads out on all sides, after the manner of other purely cellular structures, till the whole patch, before it is thrown off, appears to be principally formed of it; the surface of the mass, however, as has been stated, and certain parts of its interior, consisting of the somewhat altered mucous and submucous tissue.

The morbid changes which the glandulæ aggregatæ of the ileum undergo during continued fever, appear, from the observations I have just detailed, to be of the following nature, viz. the development of cells within the constituent vesicles of the patches to such an extent as at last to burst them, or cause their solution—the continued increase in the number of the cells, proceeding from as many centres as there are vesicles in the patch—the conglomeration of the whole into one mass above the submucous and under the mucous membrane—the distention of the latter, and the necessary ulceration and sloughing of the mass arising from this circumstance.

The whole mass, as detached from the gut, is not therefore to be considered as a slough; that portion only which consists of the upper halves of the vesicles and of the mucous membrane, being dead, the greater part consisting of the cellular mass, being merely detached from the submucous tissue, and consists of those nucleated cells, which, at first confined within their generative vesicles, had at last vegetated so much as to break their natural bounds, and to become one mass of cells, constantly increasing in numbers, except below, where the separate centres from which they originally proceeded are indicated by the processes and little pellets which are situated in the remains of the vesicle capsules.

It will have been observed that I have not employed the term "*inflammation*" in the course of the description I have just given. Whether the changes I have described originate in inflammatory action or not, of this I am certain, that the ulceration and pseudo-sloughing is an immediate effect of the distention from the submucous vegetating mass, and would occur whether the latter were produced by inflammation or not.

In regard to the history of this department of the morbid anatomy of fever, I may state, that Dr. Bright has given very beautiful representations of the sloughs and ulcers in his *Reports of Medical Cases.* Louis and Chomel have referred to the appearance of the matter which distends the glands, and compared the process to the tuberculous. Schönlein, in his *General Pathology*, has made a general allusion to the deposit, and to the changes which occur in the patches.[1] Gruby, in a work on the *Microscopic Character of Morbid Pro-*

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[1] Schönlein, Allgemeine und specielle Pathologie and Therapie. Zweiten Thiele. 1839, p. 23.

ducts,[1] was the first, as far as I can learn, who figured and described the cells of which the deposit consists. Finally, Rokitansky[2] has generalized the subject, and considered the matter deposited as peculiar to typhous fever, and referable to the same category as cancer, tubercle, &c.

My own observations have been made without reference to any hypothesis as to the pathology of fever.

ART. IV.—CASE OF SCIRRHOUS PYLORUS.

Reported by E. J. BEE, M. D., Resident Physician at the Philadelphia Almshouse in 1842.

[In the following interesting case, obscurity arose in the diagnosis owing to the existence of a bellows-sound in the epigastric region, which, at one time, suggested the idea of aneurism of the abdominal aorta. The disease was soon, however, diagnosticated to be scirrhus of the stomach, which, by pressing on the aorta, gave occasion to the sound in question.—ED.]

William Burdett was admitted into the Men's Med. Ward No. 3, May 19th, 1841: He came from Nottinghamshire, England, and was landed at Philadelphia, May 17th, 1841. When I first saw him, he was vomiting, and complained of gnawing and shooting pain in the epigastric region. No abdominal tenderness. No cough, nor pain in the chest. No cephalalgia. Countenance not sallow, but highly florid. Breath very fetid. Never had had vomiting before he came on shipboard; and his appetite was good. Was attacked with vomiting immediately after setting sail, and vomited continually during the whole passage. Not conscious of having had any pain in the epigastric region before his attack at sea.

Weighed at the time he left England thirteen stone; is now very much emaciated, and supposes he would weigh about seventy-five pounds. Had a passage over of about fifty-six days. By applying a stethoscope over the stomach, a well marked *bruit de soufflet* was heard, but no purring sound. Vomited his food imperfectly digested five or ten minutes after taking it. *Diagnosis*—Scirrhus. *Treatment*—Aqua calcis, and milk for diet. Bowels opened by common injection. May 20—Much the same, breath not so fetid. The lime water and milk checked his vomiting for a few hours only. Complains of disagreeable taste in his mouth.

℞. Tinct. Kreasot. f.ʒss.
Aquæ f. ℥ iv. ft. collutor.

The mouth to be washed with it several times daily.

21st.—Stomach much distended with wind. Twenty leeches were directed to the epigastrium. ℞. Tinct. Menth. pip. f. ʒj dropped on sugar. This gave him considerable relief.

22d.—Complained of pain shooting through the left side. A Burgundy plaster was applied over the left side, as a *placebo*, and the neutral mixture was directed.

23d.—Examined by Dr. Pennock. *Diagnosis*—Scirrhus of the stomach. Lime water and milk were continued. Injections of essence of beef were added, and also that he should use as much as he could by the mouth. All the food he swallowed was generally rejected. Small quantities of Tinct. opii were added to the injection. Wine whey was given him, but it was rejected.

Died on the 28th. Twelve hours before death said something had given way in his stomach.

Autopsy, 18 hours after death by Dr. Pennock. Lungs normal. Heart and head not examined. Liver cirrhosed. Spleen nearly natural. Intestines not examined. Kidneys normal. Stomach almost a solid scirrhous mass from the cardiac to the pyloric orifice. Greater curvature not as thick by one half as the smaller. About one-third from the pyloric orifice along greater curvature there was an ulcerated opening, as large as a quarter of a dollar. The contents of the stomach which had been effused through this opening were found in the abdomen. *Mensuration,*—Length of the stomach, following the curvature, three inches. Thickness of coats at cardia, along greater curvature, quarter of an inch. Middle half an inch, and at pylorus three quarters of an inch. The stomach would contain about five ounces. When removed from the body, it collapsed very little, and retained perfectly the outline and form of one which was distended.

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[1] Observationes Microscopicæ auctore Dav. Gruby, 1840, p. 44.
[2] Rokitansky. Handbuch der Pathologischen Anatomie, Band iii. p. 265.

E. J. Bee, M. D.

Art. V.—HOPE'S MIXTURE AS A REMEDY IN DYSENTERY.

Sussex Co. Virginia. June 17, 1842.

Dr. Dunglison,—Below, I send you my experience in the treatment of typhoid dysentery, hoping it may prove of service to some of your numerous subscribers.

If you consider it worthy of the space it will occupy in your valuable Journal, you will oblige a subscriber by inserting it. Yours, &c.,

Benjamin F. Eppes.

This disease commenced in Norfolk, Va., some time last summer, and was characterized by all the symptoms of typhoid dysentery, usually met with in the works on the subject; it had, however, other peculiar symptoms which I shall give below; considering them to be characteristic of this disease, as I have never met with them in any other. The most prominent of these was the unusual force with which the abdominal aorta pulsated; in one case, it was strong enough to remove cupping-glasses, placed on by the ordinary mode of suction, and I had to use, instead, tumblers exhausted with the flame. The skin was shrivelled and cold, with a clammy sweat extending over all parts of the body excepting the abdomen, which was very hot and dry.

Treatment. When I first saw the disease, I considered it easily managed by the remedies laid down by authors, but, alas! how soon my exalted opinion of the remedies for treatment was set at naught. I felt as a mariner would without his compass, although he had his chart. I had not yet tried the above remedy, and on referring to the first volume of the "Medical Examiner," I found it highly extolled by Prof. C. D. Meigs, whose opinion I was taught to reverence while at the University, of Va. But I will allow him to speak for himself. In speaking of a carpenter, (Miller by name), he says: "I had exhausted all of my means in his case, viz: venesection, calomel, and opium, emulsions of oil, anodyne enemata, &c.; and after many days of intense suffering he was still tormented with tormina and tenesmus, which called him up from thirty to forty times per diem. I procured the acid mixture; he took eight doses, and was well thenceforth. Since, I have used it with the most happy results in numerous cases of cholera, ordinary cholera morbus, diarrhœa, dysentery, and cholera infantum. I think it fully deserving of all the commendations bestowed on it by Mr. Hope, and I earnestly desire that the readers of your useful work may make a fair trial of it in the dysenteries which now prevail. My experience entirely accords with that of Dr. Meigs. I used it in from forty to fifty cases, and had the satisfaction to lose only two cases. Demulcents should be used as a drink and diet. I append the formula of Mr. Hope, as it may be acceptable to some of your subscribers.

℞. Acidi nitrici, f ʒj.
Mist. camphoræ, f ℥viij.
Misce et adde
Tr. opii. gtt.xl.

Dose. One-fourth part every three or four hours.

BIBLIOGRAPHICAL NOTICES.

Annual Report of the Massachusetts General Hospital.—Dr. Bell's Report of the M'Lean Asylum.[1]

We draw attention to this report mainly with the view of noticing the sensible observations of Dr. Bell, the superintendent of the M'Lean Asylum, on the numerical estimates which have been published by different insane asylums, and which make the ratio of cases greater than it is found to be, when we examine the matter without any bias. On this subject we expressed our own opinions in a former number; and shall, therefore, cite those of Dr. Bell without farther comment.

"There are but few circumstances touching the history, causes, type or results of the cases of insane persons which are capable of being stated numerically. Of these few, it unfortunately is true, that their importance is almost too insignificant as matters of curiosity or of science, to render their communication of much more value than the fashion of their dress or the aspect of the planets. I presume that the ages of patients, their civil state as married, widowed or single, the colour of the hair and eyes, the complexion and the like, might be recorded and conveyed with a tolerable degree of exactness; but beyond this any thing of the ordinary tabular statistics requires so many explanations and qualifications on account of their complexity, uncertainty and changeableness, as to deprive them entirely of the character to which they seem to aspire.

"When it is practicable by any acuteness of sagacity to seize upon, and by any precision of language to express in signs and classify in columns the degree and character of the affective sentiments, the moral qualities and the intellectual capacity of an individual, then we may look for the characteristics and results of insane hospitals in tables of scientific accuracy.

"It may be alleged that such tables, from the very nature of the subject, profess to be nothing more than mere approximations to exactitude. The question then is, whether it is not safer and better, to trust to general statements of facts on a subject of this kind, than to attempt to coerce loose approximations and conjectural estimates into the semblance of mathematical data. When an institution authorizes the general statement that cases of insanity of not many months' duration usually recover, it appears to me quite as valuable a fact in its relation to science or practice, as if a given percentage were announced from approximative data, and more so, for there are many circumstances which would probably render the last statement inexact; nay, it is impossible that it can really have the accurate character to which it pretends.

"I have ventured the opinion that very few and trifling facts relating to insane hospitals are capable of numerical expression *bonâ fide*. Even the *profession* or *vocation* of patients cannot be specifically stated in a vast number of instances, without going into the whole personal history of the individual, which of course could not be expressed in a *table*. Many, perhaps most insane men, have constitutionally ill-balanced minds, and have been restless, vacillating and unsteady in their pursuits. Some have scarcely followed any business to a degree worthy to identify them with it as having any relations to disease, (and in this view only is the research worth making), while others have run through half the mechanical arts with about equal claims to each as their calling.

"As to the *causes* of disease and its *duration* before admission, I must give my testimony that receiving patients principally from the better educated and most intelligent classes of society, and from the proximity of the residence of most of their friends to the Asylum being in such constant communication, as enables us to ascertain and verify antecedent facts to the highest practical extent, there is not one case in ten where a satisfactory or adequate single cause can be decided upon as certain, and I suspect that in a majority of cases, the first impressions of the probable causes of disease, as derived from friends, will be changed on a more mature examination.

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[1] Annual Report of the Board of Trustees of the Massachusetts General Hospital for the year 1841, 8vo. p. 40, Boston, 1842.

"The *type* or form of disease, whether mania, melancholy, dementia, moral insanity, or any other understood description of symptoms, might be given on any one day with considerable exactness. But how the same case running through several forms in the course of a few months, resting perhaps about as long in mania as in melancholia, and peradventure closing in dementia, can have an annual character applied to it, and be classified in tables, is difficult to be understood. Every one familiar with the insane knows that the character of the disease is constantly changing, many cases for years having no form so prevailing or usual as to justify its being ranked under one head rather than another.

"Even the annual return of *deaths*, (and the small-ratio of mortality is a point on which our institutions have occasionally manifested considerable elation), a subject which one would suppose capable of accurate, unqualified expression if any where, will vary much, not only as affected by the care and skill of an institution or its healthiness of position and arrangements, but by the views which may be entertained of the expediency of permitting the sufferer to spend the last weeks or days of expiring life among kindred or without removal. The ratio then of mortality will express nothing beyond a mere contingent circumstance, and possess the slightest value as a fact in science.

"The number of patients *eloped*, also a subject of statistical returns, will depend upon the exertion and expense employed in regaining the fugitives, for the number of 'eloped' is based not on the frequency of escapes, but upon those not returned. Perhaps no other way is practicable, if any expression of so unimportant a fact is worth making at all, for the stages of elopement betwixt a mere losing sight of a patient for a moment, his absence for a week or his permanent release have no line of demarcation upon which any other more constant standard can be founded.

"The returns *much improved* and *improved* are obviously mere expressions of opinion, without any settled standard by which a supposed amelioration can be measured, so as to convey any precise meaning except to the mind which judges and decides upon the given case; and the term *recovered*, apparently sufficiently plain and intelligible, is far from conveying an exact unqualified idea. Indeed, it is far from an easy duty to make out a list of those who form the recovered. The degree of mental, moral, and affective soundness is widely various. In contrasting the results of one institution with another, or with a different period of the same, there is a radical uncertainty from the rules and rights of detention or dismission. In an hospital having a legal power of detaining the patient until in the director's judgment he is recovered, those who have passed over four-fifths of their progress towards restoration, will not, as in an asylum under different regimen, be removed by impatient or presumptuous friends to add to the number of 'much improved' only. In such a case, it is the opinion, or rather the will of friends, that determines the return of 'recovered' or 'much improved.'

"As a matter of comparison this branch of statistics is still more likely to lead into error. This was adequately shown in our last annual report of this Asylum; the records demonstrating that the returns of 'recovered,' were affected a hundred per cent. in favour of late, as compared with early years, by the establishment of a rule requiring at least a three-months' residence in case recovery were not sooner obtained. Any legal or conventional power of retaining patients until the event was fairly and fully decided, would effect still another change in this respect.

"Again, if a case of insanity presumed to be of not more than six months' standing is called *recent* in one institution, and of twelve at another, the consequence will be that at the first the ratio of cures of recent cases will be essentially, and of old cases immensely greater than at the latter under identical facts! So if those dismissed from an institution in a convalescent state are entered in the register of one institution as 'much improved,' while at another, if they are heard of as sound before the end of the year, they swell the list of cured, it is manifest that the same facts make a widely opposite report.

"The two great points in relation to 'recovered' patients, on which an approximation to accuracy would be peculiarly desirable both for popular and professional information, are the degree of integrity to which the sufferer arrives in his intellectual powers, his moral sense and his affective sentiments, and the number of attacks to which he may have been previously subjected. We have never attempted to go fully into these our American institutions; we have not only not essayed to tabularize them, but have not often ventured general expressions of opinion. For aught which has been reported, the public is justified in supposing that in all cases 'recovered,' a state of original integrity is attained, while melancholy experience too strongly demonstrates that this is far from being uniformly the case; the temper, feelings and intellect of the sufferer, perhaps previously ill-balanced or ill-regulated, feel the influence of a decided attack of disease in augmented irregularity and eccentricity.

"The register too of any institution will not fail to present many instances of 'recovery,' which have 'recovered' before, and that perhaps repeatedly, cases often of periodical disease arriving at a certain stage of soundness perhaps complete, but not permanent. It is possible that a single case of this kind might constitute several recoveries in a single year! This would readily happen if the sufferer's residence were so near an institution that he could be removed when in his rational stage from its care, and be replaced when a paroxysm of excitement or depression supervened. Every Asylum has its proportion of these frequent comers. If entered anew each time of relapse, and discharged as 'recovered' in the ratio or per centage of recoveries, especially in an institution discharging not more than fifty or a hundred patients annually, the effect would be ludicrously obvious.

"A single illustration in this matter of statistics will show how easy it is 'to keep the word of promise to the ear, but break it to the sense.' An eminent English naval officer in his book of travels in the United States, shows his estimate of the high character of our institutions for the insane, by referring to the statistics of one where the ratio of recoveries is given as 91⅞ per cent. This statement was doubtless literally accurate. Every work on insanity since issued from the press abroad, comes to us repeating this fact without comment. Will it be credited that this ratio, apparently so precise and minute as to descend to fractional parts, was based on the event of twenty-three cases, discharged in one year, (*recent* cases too, not of a year's but of six months' standing), twenty-one of which recovered! *Percentages* were deduced from less than a quarter of a *hundred* units.

"I make these explanations in order that the few returns of a statistical similitude which I have presented the past and present years, may pass with the profession and with the public for their exact scientific worth. In the first years of my direction here, following the customary plan which I found existing, I made the attempt with as much care and candour as I could bring to my aid, to offer some more extended statements than have been since tried, and even held out the promise in the Report for 1838, to give a general return of the varied circumstances relating to the cases for the first twenty years of the institution. After labouring with the amplest records before me for many weeks, the project was abandoned, as neither capable of an accuracy to render it interesting to the community, and as certainly of little value to the profession. In truth, I was apprehensive that conclusions drawn from facts so uncertain, would partake quite as much of error as of truth. Unfounded opinions are of comparatively little permanent mischief in medical science, when presented merely as opinions; published with a numerical aspect, they may as *false* facts be of infinite injury.

Twenty-fifth Annual Report of the Friends' Asylum, near Frankford, Pa.[1]

This report exhibits, that this valuable institution continues to proceed as successfully as ever in its course of usefulness. Ninety-seven cases were under care during the year; of these, thirty-nine cases were admitted within the year, and the same number have been discharged.

"Of the eighteen Asylums," says the Report of the Physicians, "exclusively for the insane, in actual operation, at the present time, in the United States, that which is under your supervision was established at an earlier period than any other, with the single exception of the one at Williamsburg, Virginia. A quarter of a century has elapsed since the Friends' Asylum was opened for the reception of patients. During that period, the population of the country, and with it, the number of the insane, has been greatly augmented; that revolution which had then just commenced, in the management of those who are suffering under mental alienation, has been completed; the law of true kindness, and correct principles of physical or moral treatment, have superseded the employment of excessive corporeal restraint, coercion and punishment; with increased resources by the means of which to prosecute a practical benevolence, that true philanthropy which recognizes every fellow being as a brother or a sister, has brought into existence numerous institutions, in which the poor, as well as the rich, are made partakers of the comforts of life, and furnished with every means which may contribute to the restoration of health.

"In the improvements of Asylums corresponding with this general progress, it is believed that the one under your care, has, in a good measure, kept pace with those which have more recently been established. There are few institutions of the kind, in which the facilities for an enlightened moral treatment are superior, if equal to those of the Asylum near Frankford.

"The garden, park, woods and fields in summer, the carpenter's and the basket maker's shop, and a course of lectures on Chemistry in winter; the library, circular rail-road and horses and carriage, at all seasons of the year, afford adequate means for occupation, recreation and amusement. In warm weather, so general is the resort to these, that during the past season, it was not an unfrequent occurrence for twenty-five of the thirty men-patients, to be entirely away from the Asylum building, distributed in the fields, at the library and elsewhere. Manual employment still proves, as heretofore, the most effectual of the 'moral means,' for the promotion of a cure in the curable, and in making those more comfortable and contented, in whom the disease appears to have become permanently established. But, while this pre-eminence is accorded to useful labour, we cannot entirely overlook the evident utility of recreation and innocent amusement. During the past season, a patient labouring under the agonizing delusions of the most abject melancholy, was admitted into the Asylum. In his opinion all mankind had been brought to 'ruin and destruction,' by the acts of himself alone. To him, the smoke ascending from a chimney, indicated the commencement of a general conflagration of the universe; a conflagration imposed upon all created things, in retribution for the sins which he had committed. By long persuasion, he was induced to assist in raking leaves, in the grove; but to his mind he gathered them for no good purpose. They were the funeral pile upon which he was to be immolated.

"The first smile which was won from this unfortunate patient, appeared while he was playing at ball, a game in which he had been induced to engage, after repeated and prolonged entreaty. From that time, his progress to recovery was constant and unusually rapid." P. 21.

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[1] Twenty-fifth Annual Report on the State of the Asylum for the Relief of Persons deprived of the Use of their Reason, 8vo. pp. 30, Philadelphia, 1842.

Proceedings of the Medical Convention of Ohio.[1]

It is only of late that we have received the Proceedings of the Medical Convention of Ohio, whose meetings are likely to be productive of much advantage to the profession of the West, not only by reason of the interesting papers that are read before it, but of the good fellowship that cannot fail to be engendered between the members of the profession. The highly respectable Dr. Geo. W. Boerstler, of Fairfield county, presided: and Drs. Kreider and Awl were appointed Secretaries.

Besides the proceedings of the Convention, the pamphlet before us contains sundry interesting papers read before it: viz. 1st. On diseases induced by mercury, by Dr. J. P. Harrison. 2. Report on auscultation and percussion, by Drs. Mendenhall, R. L. Howard, and C. D. Brayton. 3. Address on medical education, by Dr. J. P. Harrison. 4. Florula Lancastriensis, or a catalogue, comprising nearly all the flowering and filiform plants, growing naturally within the limits of Fairfield county, with notes of such as are medicinal, by Dr. Bigelow. 5. An address by Dr. Dawson on a form of fever which prevailed in the eastern part of Green county, &c.

Third Book of Natural History—Ornithology. By Ruschenberger.[2]

The third book of Natural History is worthy of being placed alongside the first and the second. Of those we have already spoken; and we may now, we presume, congratulate Dr. Ruschenberger and the publisher, that sufficient encouragement has been received to induce them to continue this interesting and instructive series.

Squarey's Agricultural Chemistry.[3]

This work is not strictly medical, yet it is on a department of science of which no physician can, with propriety, be ignorant. Many of our physicians, too, are compelled to be practical farmers, and to them Mr. Squarey's work will be especially useful. It is concise, clearly expressed, and contains a vast amount of valuable matter in a very small compass, and at such a price that no one can plead poverty as an excuse for not possessing it.

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[1] Proceedings of the Medical Convention of Ohio, held at Columbus, on the 5th, 6th, and 7th of May, 1841; with Papers on several subjects, read before that body; 8vo. pp. 84, Columbus, 1841.

[2] Ruschenberger's Series; Ornithology; the Natural History of Birds: Third Book of Natural History; prepared for the use of schools and colleges, by W. S. W. Ruschenberger, M. D., &c. &c., from the text of Milne Edwards and Achille Comte, &c., &c., with plates; 12mo. pp. 125, Philadelphia, 1842.

[3] A popular treatise on Agricultural Chemistry, intended for the use of the practical Farmer, by Charles Squarey, Chemist: 12mo. pp. 156, Philadelphia, 1842.

Kane's Experiments on Kiesteine.[1]

This paper exhibits the results of careful and accurate observation on a subject which required a series of well conducted experiments, and which we have long desired to see instituted. Dr. Kane has amply exhibited, that he was fully competent to the task, and has carried it through in a manner which will do him credit both now and hereafter; for his paper cannot fail to be cited by all who may hereafter wish to be considered on a level with the existing state of knowledge on the interesting and important department of our science of which it treats. The results of all his labours are summed up by Dr. Kane as follows:

"1. That the Kiesteine is not peculiar to pregnancy, but may occur whenever the lacteal elements are secreted without a free discharge at the mammæ.

2. That though sometimes obscurely developed, and occasionally simulated by other pellicles, it is generally distinguishable from all others.

3. That where pregnancy is possible, the exhibition of a clearly defined kiesteinic pellicle is one of the least equivocal proofs of that condition; and

4. That when the pellicle is not formed in the more advanced stages of supposed pregnancy, the probabilities, if the female be otherwise healthy, are as 20 to 1 (81 to 4) that the prognosis is incorrect." P. 18.

On the Relations of the U. S. Medical Corps.[2]

This is an exceedingly temperate and well written exposé of the condition of the medical officers of the Navy, whose grievances are ably stated, and, we should hope, require but to be stated to be redressed. The pamphlet cannot fail to attract the attention of the Secretary of the Navy to the subject. The position of the naval medical officer when he first appears on shipboard, it need scarcely be said, is very different from that of a youth who first enters the service as a midshipman. The one has acquired an amount of essential knowledge, which enables him in private life to assume a station not inferior to any one; and this fact should be borne in mind in the regulations of the naval and military service; yet, hitherto, it has scarcely been heeded. The author of the Exposition is evidently one of those educated gentlemen, and his statements are worthy of all attention.

New England Quarterly Journal, No. I.[3]

The first number of this new Periodical impresses us favorably. The Editors are gentlemen, and medical scholars; and they are supported by a long train of able co-laborers. It contains papers by Drs. Thomas Gray, jr., E. Warren, D. Humphreys Storer, E. Hale, jr., J. B. S. Jackson; Joseph Sargent, of Worcester, Geo. Hayward, J. Mason Warren, and Geo. A. Bethune: with Reviews,

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[1] Experiments on Kiesteine, with remarks on its application to the diagnosis of pregnancy. An Inaugural Dissertation for the degree of Doctor of Medicine, by Elisha K. Kane, M. D., of Philadelphia. Published by the recommendation of the Faculty of the University of Pennsylvania; 8vo. pp. 26.

[2] An Exposition of the unjust and injurious relations of the U. S. Naval Medical Corps, by a member; 8vo. pp. 22, Baltimore, 1842.

[3] The New England Quarterly Journal of Medicine and Surgery. Editors, Charles E. Ware, M. D., Samuel Parkman, M. D., No. I July, 1842; pp. 156, Boston, 1842.

Bibliographical Notices, Scientific Intelligence, and Extracts from Foreign and American Journals.

Surely a Journal so well supported, and supplied with excellent materials, under the guidance of able editors, cannot fail to receive every encouragement.

MISCELLANEOUS NOTICES.

[Through our friend, Professor J. K. Mitchell, we have been favored with the following announcement of the forthcoming publication of Liebig, which every lover of science will be anxious to see.]

Liebig's new work on Organic Chemistry and Physiology.—The appearance of this work is looked for with great interest by the medical profession in England, but has been delayed in consequence of new experiments and researches in which the author has been engaged. It is understood by letters from Professor Gregory of Aberdeen, who has translated the work, that it had been found necessary to cancel several of the pages, for the purpose of correcting serious errors, and of incorporating the results of the new experiments. The publication of this work under the supervision of Professor Webster, of Harvard college, at the request of the author, will be completed immediately on the reception of the corrections and additions from Dr. Liebig. In a letter from Professor Gregory, of 14th May, he says, "In my opinion this work will mark the commencement of a new era in Physiology. In translating it, I have experienced the highest admiration of the profound sagacity which has enabled Liebig to erect so very beautiful a structure on the foundation of facts which others have allowed to remain for so long utterly useless, and of the logical structure and extreme cogency of his arguments. There is hardly a point in physiology accessible to chemistry (I mean, of course, those on which experiments have been actually made) on which he has not, by the mere force of his intellect, thrown the brightest light. In short, we now feel that physiology has entered on the true path, and the results, before long, will, I prophesy, be altogether astonishing." The work is to appear in England, under the editorship of Dr. Gregory, and in this country, under that of Professor Webster, at the same time.

Castleton Medical College.—The Catalogue for the Spring Term, 1842, contains the names of seventy students: whereof there were, from Lower Canada, 3; from Massachusetts, 3; from New York, 29; from New Hampshire, 1; from Pennsylvania, 2; from Vermont, 31; and from Wisconsin, 1.

Necrology. We notice, in the foreign and domestic Journals, the deaths of several distinguished members of the Profession, whose names are well known to all our readers. For example: of Sir Charles Bell, the eminent physiologist and surgeon, at the age of 67; of Dr. Yelloly, who was at one time in great eminence in London, and subsequently settled in Norwich; of Hann, of Berlin; and of Fricke, of Hamburgh, of Devergie, of Paris; of Dr. Blake, the author of a work on Delirium Tremens; and of Dr. Oliver, lately professor in the Medical College of Ohio, and the author of a work on Physiology, which is in its second edition.

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